

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*Sheet **1** of **57****Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivlemore
<b>Attorney Docket Number</b>	ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	1	2002/0049173 A1	04-25-2002	Bennett et al.	
	2	2002/0071826 A1	06-13-2002	Tamarkin et al.	
	3	2002/0081577 A1	06-27-2002	Kilkuskie et al.	
	4	2002/0102267 A1	08-01-2002	Lu et al.	
	5	2002/0147332 A1	10-10-2002	Kaneko	
	6	2002/0156235 A1	10-24-2002	Manoharan et al.	
	7	2002/0162126 A1	10-30-2002	Beach et al.	
	8	2002/0165189 A1	11-07-2002	Crooke	
	9	2002/1051512 A1	10-17-2002	Peyman et al.	
	10	2003/0004325 A1	01-02-2003	Cook et al.	
	11	2003/0027780 A1	02-06-2003	Hardee et al.	
	12	2003/0096286 A1	05-22-2003	Crooke	
	13	2003/0096287 A1	05-22-2003	Crooke	
	14	2003/0096784 A1	05-22-2003	Crooke	
	15	2003/0119777 A1	06-26-2003	Crooke	
	16	2003/0158403 A1	08-21-2003	Manoharan et al.	
	17	2003/0166282 A1	09-04-2003	Brown et al.	
	18	2003/0175906 A1	09-18-2003	Manoharan et al.	
	19	2003/0187240 A1	10-02-2003	Cook et al.	
	20	2003/0190635 A1	10-09-2003	McSwiggen	
	21	2003/0207804 A1	11-06-2003	Manoharan et al.	
	22	2003/0224377 A1	12-04-2003	Wengel et al.	
	23	2004/0001811 A1	01-01-2004	Kreutzter et al.	
	24	2004/0009938 A1	01-15-2004	Manoharan et al.	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*Sheet **2** of **57****Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivliemore
<b>Attorney Docket Number</b>	ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	25	2004/0014957 A1	01-22-2004	Eldrup et al.	
	26	2004/0018999 A1	01-29-2004	Beach et al.	
	27	2004/0102618 A1	05-27-2004	Crooke et al.	
	28	2004/0171033 A1	09-02-2004	Baker et al.	
	29	2004/0259247 A1	12-23-2004	Tuschi et al.	
	30	2005/0020525 A1	01-27-2005	McSwiggen et al.	
	31	2005/0080246 A1	04-14-2005	Allerson et al.	
	32	2005/0164209 A1	07-28-2005	Bennett et al.	
	33	2005/0181382 A1	08-18-2005	Zamore et al.	
	34	2005/0221275 A1	10-06-2005	Bennett et al.	
	35	2005/0245474 A1	11-03-2005	Baker et al.	
	36	2005/0273868 A1	12-08-2005	Rana	
	37	2006/0127891 A1	06-15-2006	McSwiggen et al.	
	38	2007/0032446 A1	02-08-2007	Cook et al.	
	39	4,381,344	04-26-1983	Rideout et al.	
	40	4,415,732	11-15-1983	Caruthers et al.	
	41	4,426,330	01-17-1984	Sears	
	42	4,458,066	07-03-1984	Caruthers et al.	
	43	4,476,301	10-09-1954	Imbach et al.	
	44	4,500,707	02-19-1985	Caruthers et al.	
	45	4,511,713	04-16-1985	Miller et al.	
	46	4,534,899	08-13-1985	Sears	
	47	4,587,044	05-06-1986	Miller	
	48	4,605,735	08-12-1986	Miyoshi	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet 3 of 57

**Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivimore
<b>Attorney Docket Number</b>	ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	49	4,667,025	05-19-1987	Miyoshi	
	50	4,668,777	05-26-1987	Caruthers et al.	
	51	4,689,320	08-25-1987	Kaji	
	52	4,725,677	02-16-1988	Koster et al.	
	53	4,760,017	07-26-1988	McCormick	
	54	4,762,779	08-09-1988	Snitman	
	55	4,789,737	12-06-1988	Miyoshi	
	56	4,824,941	04-25-1989	Gordon	
	57	4,828,979	05-09-1989	Klevan	
	58	4,835,263	05-30-1989	Nguyen	
	59	4,845,205	07-04-1989	Huynh Dinh et al.	
	60	4,849,320	07-18-1989	Irving et al.	
	61	4,849,513	07-18-1989	Smith et al.	
	62	4,876,335	10-24-1989	Yamane	
	63	4,904,582	02-27-1990	Tullis	
	64	4,924,624	05-15-1990	Suhadolnik et al.	
	65	4,948,882	08-14-1990	Ruth	
	66	4,958,013	09-18-1990	Letsinger	
	67	4,965,350	10-23-1990	Inoue et al.	
	68	4,973,679	11-27-1990	Caruthers et al.	
	69	4,981,957	01-01-1991	Lebleu	
	70	5,000,000	03-19-1991	Ingram et al.	
	71	5,013,556	05-07-1991	Woodle et al.	
	72	5,082,830	01-21-1992	Brakel	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

4

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivliemore

**Attorney Docket Number**

ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	73	5,108,921	04-28-1992	Low et al.	
	74	5,109,124	04-28-1992	Ramathandran	
	75	5,112,963	05-12-1992	Pieles	
	76	5,118,800	06-02-1992	Fung	
	77	5,118,802	06-02-1992	Smith	
	78	5,132,418	07-21-1992	Caruthers et al.	
	79	5,134,066	07-28-1992	Rogers et al.	
	80	5,138,045	08-11-1992	Cook	
	81	5,149,782 A	09-22-1992	Chang et al.	
	82	5,166,315	11-24-1992	Summerton et al.	
	83	5,175,273	12-29-1992	Bischofberger et al.	
	84	5,177,196	01-05-1993	Meyer, Jr. et al.	
	85	5,185,444	02-09-1993	Summerton et al.	
	86	5,188,897	02-23-1993	Suhadolnik et al.	
	87	5,194,599	03-16-1993	Froehler et al.	
	88	5,212,295 A	05-18-1993	Cook	
	89	5,213,804	05-25-1993	Martin et al.	
	90	5,214,134	05-25-1993	Weis et al.	
	91	5,214,135 A	05-25-1993	Srivastava et al.	
	92	5,214,136	05-25-1993	Lin	
	93	5,216,141	06-01-1993	Benner	
	94	5,218,105	06-08-1993	Cook	
	95	5,220,007	06-15-1993	Pederson	
	96	5,227,170	07-13-1993	Sullivan	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

5

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivienne

**Attorney Docket Number**

ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	97	5,245,022	09-14-1993	Weis	
	98	5,254,469	10-19-1993	Warren	
	99	5,258,506	11-02-1993	Urdea	
	100	5,262,536	11-16-1993	Hobbs	
	101	5,264,221	11-23-1993	Tagawa et al.	
	102	5,264,423	11-23-1993	Cohen et al	
	103	5,272,250	12-21-1993	Spielvogel	
	104	5,276,019	01-04-1994	Cohen et al	
	105	5,278,302	01-11-1994	Caruthers et al.	
	106	5,286,717	02-15-1994	Cohen et al	
	107	5,292,873	03-08-1994	Rokita	
	108	5,317,098	05-31-1994	Shizuya	
	109	5,319,080	06-07-1994	Leumann	
	110	5,321,131	06-14-1994	Agrawal et al.	
	111	5,354,844	10-11-1994	Beug et al.	
	112	5,356,633	10-18-1994	Woodle et al.	
	113	5,367,066	11-22-1994	Urdea et al.	
	114	5,371,241	12-06-1994	Brush	
	115	5,391,723	02-21-1995	Priest	
	116	5,393,878	02-28-1995	Leumann	
	117	5,395,619	03-07-1995	Zalipsky et al.	
	118	5,399,676	03-21-1995	Froehler et al.	
	119	5,405,938	04-11-1995	Summerton et al.	
	120	5,405,939	04-11-1995	Suhadolnik et al.	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

6

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	121	5,414,077	05-09-1995	Lin	
	122	5,416,016	05-16-1995	Low et al.	
	123	5,416,203	05-16-1995	Letsinger	
	124	5,417,978	05-23-1995	Tari et al.	
	125	5,432,272	07-11-1995	Benner	
	126	5,434,257	07-18-1995	Matteucci et al.	
	127	5,446,137	08-29-1995	Maag	
	128	5,451,463	09-19-1995	Nelson	
	129	5,453,496	09-26-1995	Caruthers et al.	
	130	5,455,233	10-03-1995	Spielvogel et al.	
	131	5,457,187	10-10-1995	Gmeiner et al.	
	132	5,459,127	10-17-1995	Felgner et al.	
	133	5,462,854	10-31-1995	Coassin et al.	
	134	5,466,677	11-14-1995	Baxter et al.	
	135	5,469,854	11-28-1995	Unger et al.	
	136	5,470,967	11-28-1995	Huie et al.	
	137	5,486,603	01-23-1996	Bahr	
	138	5,491,133	02-13-1996	Walder	
	139	5,502,177	03-26-1996	Matteucci et al.	
	140	5,510,475	04-23-1996	Agrawal	
	141	5,512,295	04-30-1996	Kornberg et al.	
	142	5,512,439	04-30-1996	Hornes	
	143	5,512,667	04-30-1996	Reed	
	144	5,514,785	05-07-1996	Van Ness	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*Sheet **7** of **57****Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivienne
<b>Attorney Docket Number</b>	ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	145	5,519,126	05-21-1996	Hecht	
	146	5,521,291	05-28-1996	Curiel et al.	
	147	5,525,465	06-11-1996	Haralambidis	
	148	5,525,711	06-11-1996	Hawkins et al.	
	149	5,527,528	06-18-1996	Allen et al.	
	150	5,527,899	06-18-1996	Froehler	
	151	5,532,130	07-02-1996	Alul	
	152	5,534,259	07-09-1996	Zalipsky et al.	
	153	5,536,821	07-16-1996	Agrawal et al.	
	154	5,539,082	07-23-1996	Nielsen et al.	
	155	5,541,306	07-30-1996	Agrawal et al.	
	156	5,541,307	07-30-1996	Cook et al.	
	157	5,541,313	07-30-1996	Ruth	
	158	5,543,152	08-06-1996	Webb et al.	
	159	5,543,158	08-06-1996	Gref et al.	
	160	5,545,730	08-13-1996	Urdea	
	161	5,547,932	08-20-1996	Curiel et al.	
	162	5,550,111	08-27-1996	Suhadolnik et al.	
	163	5,552,538	09-13-1996	Urdea	
	164	5,552,540	09-03-1996	Haralambidis	
	165	5,556,948	09-17-1996	Tagawa et al.	
	166	5,561,225	10-01-1996	Maddry et al.	
	167	5,563,253	10-08-1996	Agrawal et al.	
	168	5,565,350	10-15-1996	Kmieciak	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

8

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivienne

**Attorney Docket Number**

ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	169	5,565,552	10-15-1996	Magda	
	170	5,565,555	10-15-1996	Froehler et al.	
	171	5,567,810	10-22-1996	Weis	
	172	5,571,799	11-05-1996	Tkachuk et al.	
	173	5,574,142	11-12-1996	Meyer	
	174	5,576,302 A	11-19-1996	Cook et al.	
	175	5,578,717	11-26-1996	Urdea	
	176	5,578,718	11-26-1996	Cook	
	177	5,580,575	12-03-1996	Unger et al.	
	178	5,580,731	12-03-1996	Chang	
	179	5,582,188 A	12-10-1996	Benderev et al.	
	180	5,583,020	12-17-1996	Arnold, Jr. et al.	
	181	5,585,481	12-17-1996	Arnold	
	182	5,587,361	12-24-1996	Cook et al.	
	183	5,587,371	12-24-1996	Sessler	
	184	5,587,469	12-24-1996	Cook et al.	
	185	5,591,584	01-07-1997	Chang	
	186	5,591,721	01-07-1997	Agrawal et al.	
	187	5,594,121	01-14-1997	Froehler et al.	
	188	5,595,726	01-21-1997	Magda	
	189	5,595,756	01-21-1997	Bally et al.	
	190	5,596,086	01-21-1997	Matteucci et al.	
	191	5,596,091	01-21-1997	Switzer et al.	
	192	5,597,696	01-28-1997	Linn	

Examiner  
SignatureDate  
Considered



Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

9

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	193	5,597,909	01-28-1997	Urdea	
	194	5,599,797 A	02-04-1997	Cook et al.	
	195	5,599,923	02-04-1997	Sessler	
	196	5,599,925	02-04-1997	Torii	
	197	5,599,928	02-04-1997	Hemmi et al.	
	198	5,607,923 A	03-04-1997	Cook et al.	
	199	5,608,046	03-04-1997	Cook	
	200	5,610,289	03-11-1997	Cook et al.	
	201	5,610,300	03-11-1997	Altmann	
	202	5,612,469 A	03-18-1997	Goodchild	
	203	5,614,621	03-25-1997	Ravikumar et al.	
	204	5,618,704	04-08-1997	Sanghvi et al.	
	205	5,623,070	04-22-1997	Cook et al.	
	206	5,625,050	04-29-1997	Beaton et al.	
	207	5,627,053	05-06-1997	Usman	
	208	5,633,360	05-27-1997	Bischofberger et al.	
	209	5,634,488 A	06-03-1997	Martin, Jr.	
	210	5,635,488 A	06-03-1997	Cook et al.	
	211	5,639,647 A	06-17-1997	Usman et al.	
	212	5,643,889 A	07-01-1997	Suhadolnik et al.	
	213	5,645,985	07-08-1997	Froehler et al.	
	214	5,646,265	07-08-1997	Mcgee	
	215	5,646,269	07-08-1997	Matteucci et al.	
	216	5,652,355	07-29-1997	Metelev	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

10

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	217	5,652,356	07-29-1977	Agrawal	
	218	5,658,731 A	08-19-1997	Sproat et al.	
	219	5,658,873	08-19-1997	Bertsch-Frank	
	220	5,661,134 A	08-26-1997	Cook et al.	
	221	5,663,312	09-02-1997	Chaturvedula	
	222	5,663,360 A	09-02-1997	Bortolaso et al.	
	223	5,670,633	09-23-1977	Cook et al.	
	224	5,672,662 A	09-30-1997	Harris et al.	
	225	5,672,695 A	09-30-1997	Eckstein et al.	
	226	5,672,697	09-30-1997	Buhr et al.	
	227	5,677,289 A	10-14-1997	Torrence et al.	
	228	5,677,437	10-14-1997	Teng et al.	
	229	5,677,439	10-14-1997	Weis et al.	
	230	5,681,941	10-28-1997	Cook et al.	
	231	5,684,142 A	11-04-1997	Mishra et al.	
	232	5,684,143 A	11-04-1997	Gryaznov et al.	
	233	5,684,243 A	11-04-1997	Gururaja et al.	
	234	5,688,941	11-18-1997	Cook	
	235	5,698,687 A	12-16-1997	Eckstein et al.	
	236	5,700,785 A	12-23-1997	Suhadolnik et al.	
	237	5,700,920	12-23-1997	Altmann	
	238	5,700,922	12-23-1997	Cook	
	239	5,714,166 A	02-03-1998	Tomalia et al.	
	240	5,714,331	02-03-1998	Buchardt et al.	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

11

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivilemore

**Attorney Docket Number**

ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	241	5,716,824 A	02-10-1998	Beigelman et al.	
	242	5,719,262	02-17-1998	Buchardt et al.	
	243	5,721,218	02-24-1998	Froehler et al.	
	244	5,726,297 A	03-10-1998	Gryaznov et al.	
	245	5,750,666 A	05-12-1998	Caruthers et al.	
	246	5,750,669 A	05-12-1998	Rosch et al.	
	247	5,750,692	05-12-1998	Cook et al.	
	248	5,760,209	06-02-1998	Cheruvallath et al.	
	249	5,763,588	06-09-1998	Matteucci et al.	
	250	5,770,713	06-23-1998	Imbach et al.	
	251	5,770,716 A	06-23-1998	Khan et al.	
	252	5,777,092 A	07-07-1998	Cook et al.	
	253	5,789,576 A	08-04-1998	Daily et al.	
	254	5,792,608	08-11-1998	Swaminathan et al.	
	255	5,792,747	08-11-1998	Schally	
	256	5,792,844 A	08-11-1998	Sanghvi et al.	
	257	5,792,847 A	08-11-1998	Buhr et al.	
	258	5,808,023 A	09-15-1998	Sanghvi et al.	
	259	5,817,781 A	10-06-1998	Swaminathan et al.	
	260	5,830,635 A	11-03-1998	Agnello	
	261	5,830,653	11-03-1998	Froehler et al.	
	262	5,837,835 A	11-17-1998	Gryaznov et al.	
	263	5,837,852 A	11-17-1998	Chung et al.	
	264	5,840,876 A	11-24-1998	Beigelman et al.	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

12

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivienne

**Attorney Docket Number**

ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	265	5,859,221 A	01-12-1999	Cook et al.	
	266	5,872,232 A	02-16-1999	Cook et al.	
	267	5,874,553	02-23-1999	Peyman et al.	
	268	5,914,396 A	06-22-1999	Cook et al.	
	269	5,936,080 A	08-10-1999	Stec et al.	
	270	5,945,521 A	08-31-1999	Just et al.	
	271	5,965,720 A	10-12-1999	Gryaznov et al.	
	272	5,965,721 A	10-12-1999	Cook et al.	
	273	5,969,116 A	10-19-1999	Martin	
	274	5,969,118 A	10-19-1999	Sanghvi et al.	
	275	5,986,083 A	11-16-1999	Dwyer et al.	
	276	5,998,588 A	12-07-1999	Hoffman et al.	
	277	6,005,087	12-21-1999	Cook et al.	
	278	6,005,094 A	12-21-1999	Simon et al.	
	279	6,005,096	12-21-1999	Matteucci et al.	
	280	6,007,992	12-28-1999	Lin et al.	
	281	6,013,785 A	01-11-2000	Bruice et al.	
	282	6,015,886 A	01-18-2000	Dale et al.	
	283	6,020,475	02-01-2000	Capaldi et al.	
	284	6,025,140	02-15-2000	Langel et al.	
	285	6,028,183	02-22-2000	Lin et al.	
	286	6,028,188 A	02-22-2000	Arnold, Jr. et al.	
	287	6,043,060	03-28-2000	Imanishi	
	288	6,043,352 A	03-28-2000	Manoharan et al.	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

13

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivilemore

**Attorney Docket Number**

ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	289	6,051,699	04-18-2000	Ravikumar	
	290	6,087,484 A	07-11-2000	Goodchild	
	291	6,096,875 A	08-01-2000	Khan et al.	
	292	6,111,085 A	08-29-2000	Cook et al.	
	293	6,117,657 A	09-12-2000	Usman et al.	
	294	6,121,437	09-19-2000	Guzaev et al.	
	295	6,127,346	10-03-2000	Peyman et al.	
	296	6,127,533 A	10-03-2000	Cook et al.	
	297	6,147,200	11-14-2000	Manoharan et al.	
	298	6,153,737 A	11-28-2000	Manoharan et al.	
	299	6,166,188 A	12-26-2000	Cook et al.	
	300	6,169,177	01-02-2001	Manoharan	
	301	6,172,208 B1	01-09-2001	Cook	
	302	6,172,209	01-09-2001	Manoharan et al.	
	303	6,172,216 B1	01-09-2001	Bennett et al.	
	304	6,207,646	03-27-2001	Krieg et al.	
	305	6,222,025 B1	04-24-2001	Cook et al.	
	306	6,227,982 B1	05-08-2001	Wurster	
	307	6,239,265 B1	05-29-2001	Cook	
	308	6,239,272 B1	05-29-2001	Beigelman et al.	
	309	6,268,490	07-31-2001	Imanishi et al.	
	310	6,271,358 B1	08-07-2001	Manoharan et al.	
	311	6,277,634	08-21-2001	McCall et al.	
	312	6,277,967 B1	08-21-2001	Manoharan	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

14

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivliemore

**Attorney Docket Number**

ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code (if known)			
	313	6,281,201 B1	08-28-2001	Suhadolnik et al.	
	314	6,284,538 B1	09-04-2001	Monia et al.	
	315	6,287,860	09-11-2001	Monia et al.	
	316	6,300,319 B1	10-09-2001	Manoharan	
	317	6,307,040 B1	10-23-2001	Cook et al.	
	318	6,326,358 B1	12-04-2001	Manoharan	
	319	6,326,478	12-04-2001	Cheruvallath et al.	
	320	6,331,617 B1	12-18-2001	Weeks et al.	
	321	6,335,432 B1	01-01-2002	Segev	
	322	6,335,434 B1	01-01-2002	Guzaev et al.	
	323	6,335,437 B1	01-01-2002	Manoharan et al.	
	324	6,344,436 B1	02-05-2002	Smith et al.	
	325	6,358,931 B1	03-19-2002	Cook et al.	
	326	6,365,379 B1	04-02-2002	Lima et al.	
	327	6,395,437 B1	05-28-2002	Wollesen	
	328	6,395,492 B1	05-28-2002	Manoharan et al.	
	329	6,410,702 B1	06-25-2002	Swaminathan et al.	
	330	6,414,127	07-02-2002	Lin et al.	
	331	6,420,549 B1	07-16-2002	Cook et al.	
	332	6,426,220	07-30-2002	Bennett et al.	
	333	6,440,943 B1	08-27-2002	Cook et al.	
	334	6,444,806 B1	09-03-2002	Veerapanani et al.	
	335	6,465,628	10-15-2002	Ravikumar et al.	
	336	6,476,205 B1	11-05-2002	Buhr et al.	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 15 of 57

**Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivlemore
<b>Attorney Docket Number</b>	ISIS-5207

**U. S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	337	6,486,308 B2	11-26-2002	Kutyavin et al.	
	338	6,525,031 B2	02-25-2003	Manoharan	
	339	6,528,631 B1	03-04-2003	Cook et al.	
	340	6,531,584 B1	03-11-2003	Cook et al.	
	341	6,534,639 B1	03-18-2003	Manoharan et al.	
	342	6,559,279 B1	05-06-2003	Manoharan et al.	
	343	6,593,466	07-15-2003	Manoharan et al.	
	344	6,656,730	12-02-2003	Manoharan	
	345	6,670,461	12-30-2003	Wengel et al.	
	346	6,673,611 B2	01-06-2004	Thompson et al.	
	347	6,683,167 B2	01-27-2004	Metelev et al.	
	348	6,794,499	09-21-2004	Wengel et al.	
	349	6,887,906	05-03-2005	Teng et al.	
	350	RE34,069	09-15-1992	Koster et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials	Cite No	Foreign Patent Document Country Code- Number -Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	351	CA 2,017,369 C	01-23-2001	Roche Diagnostics GmbH		
	352	DE 10100588 A1	07-18-2002	Ribopharma		X
	353	DE 3915432 A1	11-15-1990	Klockner-Humboldt-Deutz AG		X
	354	DE 4110085 A1	01-10-1992	Boehringer Ingelheim Int'l. GmbH		X
	355	EP 0260032 A2	03-16-1988	Ajinmoto Co., Inc.		

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 16 of 57

**Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivliemore
<b>Attorney Docket Number</b>	ISIS-5207

**FOREIGN PATENT DOCUMENTS**

Examiner Initials	Cite No	Foreign Patent Document Country Code- Number -Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	356	EP 0269574 A2	06-01-1988	Nippon Zoki Pharmaceutical Co. Ltd.		
	357	EP 0287313 A2	10-19-1988	Marquez		
	358	EP 0339330 A2	11-02-1989	Spradau, Hans F.W.		
	359	EP 0417999 A1	03-20-1991	The Wellcome Foundation Limited		
	360	EP 1389637 A1	02-18-2004	Atugen AG		
	361	WO 00/08044 A1	02-17-2000	Isis Pharmaceuticals, Inc.		
	362	WO 00/44895 A1	08-03-2000	Kreutzer et al.		
	363	WO 00/44914 A1	08-03-2000	Med. Coll. Of Georgia		
	364	WO 00/49035 A1	08-24-2000	General Hospital		
	365	WO 00/63364 A2	10-26-2000	Am. Home Prod.		
	366	WO 00/76554 A1	12-21-2000	Isis Pharmaceuticals, Inc.		
	367	WO 01/36641 A2	05-25-2001	Chiron Corp.		
	368	WO 01/36646 A1	05-25-2001	Cancer Res. Campaign Tech.		
	369	WO 01/48183 A2	07-05-2001	Devgen NV		
	370	WO 01/75164 A2	10-11-2001	Whitehead Inst.		
	371	WO 02/36743 A2	05-10-2002	Isis Pharmaceuticals, Inc.		
	372	WO 03/004602 A2	01-16-2003	Isis Pharmaceuticals, Inc.		
	373	WO 03/070918 A2	08-28-2003	Ribozyme Pharm Inc.		
	374	WO 2004/015107 A2	02-19-2004	Atugen AG		
	375	WO 2004/041889 A2	05-21-2004	Isis Pharm.		
	376	WO 2004/043977 A2	05-27-2004	Isis Pharm.		
	377	WO 2004/043978 A2	05-27-2004	Isis Pharm.		
	378	WO 2004/043979 A2	05-27-2004	Isis Pharm.		

Examiner  
SignatureDate  
Considered



Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				<b>Application Number</b>	10/701,236
				<b>Filing Date</b>	11-04-2003
				<b>First Named Inventor</b>	Brenda F. Baker
				<b>Art Unit</b>	1635
				<b>Examiner Name</b>	Tracy Ann Vivilemore
Sheet	17	of	57	<b>Attorney Docket Number</b>	ISIS-5207

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No	Foreign Patent Document Country Code- Number -Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	379	WO 2004/044133 A2	05-27-2004	Isis Pharm.		
	380	WO 2004/044136 A2	05-27-2004	Isis Pharm.		
	381	WO 2004/044138 A2	05-27-2004	Isis Pharm.		
	382	WO 2004/044139 A2	05-27-2004	Isis Pharmaceuticals Inc.		
	383	WO 2004/044140 A2	05-27-2004	Isis Pharm.		
	384	WO 2004/083430 A2	09-30-2004	Elmen et al.		
	385	WO 2004/097049 A1	11-11-2004	Isis Pharmaceuticals, Inc.		
	386	WO 2004/113496 A2	12-29-2004	Isis Pharm.		
	387	WO 2005/027962 A2	03-31-2005	Isis Pharm.		
	388	WO 89/12060 A1	12-14-1989	Benner		
	389	WO 90/15814 A1	12-27-1990	Meiogenics, Inc.		
	390	WO 91/06556 A1	05-16-1991	Gilead Sciences, Inc.		
	391	WO 91/10671 A1	07-25-1991	Isis Pharmaceuticals, Inc.		
	392	WO 91/15499 A1	10-17-1991	Europaisches Laboratorium Fur Molekularbiologie		
	393	WO 92/02258 A1	02-20-1992	Isis Pharmaceuticals, Inc.		
	394	WO 92/03568 A1	03-05-1992	Isis Pharmaceuticals, Inc.		
	395	WO 93/07883 A1	04-29-1993	Isis Pharmaceuticals, Inc.		
	396	WO 93/24510 A1	12-09-1993	Centre National de la Recherche		
	397	WO 94/26764 A1	11-24-1994	Centre National de la Recherche		
	398	WO 96/11205 A1	04-18-1996	Isis Pharmaceuticals, Inc.		
	399	WO 97/26270 A2	07-24-1997	Ribozyme Pharm.		
	400	WO 98/39352 A1	09-11-1998	Imanishi		

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				<b>Application Number</b>	10/701,236
				<b>Filing Date</b>	11-04-2003
				<b>First Named Inventor</b>	Brenda F. Baker
				<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivienne				
<b>Attorney Docket Number</b>	ISIS-5207				
Sheet	18	of	57		

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No	Foreign Patent Document Country Code- Number -Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	401	WO 98/52614 A2	11-26-1998	The Board of Trustees of the Leland Stanford Junior Univ.		

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), Volume-issue Number(s), publisher, city and/or country where published.				T
	402	Abe, A., et al., "Conformational energies and the random-coil dimensions and dipole moments of the polyoxides CH <sub>3</sub> O[CH <sub>2</sub> ] <sub>y</sub> O)xCH <sub>3</sub> ", J. Am. Chem. Soc., 1976, 98(21), 6468-6476				
	403	Afonina, I. et al., "Sequence-specific arrest of primer extension on single-stranded DNA by an oligonucleotide-minor groove binder conjugate," Proc. Natl. Acad. Sci. USA (1996) 93:3199-3204.				
	404	Agarwal, et al., "Oligodeoxynucleoside Phosphoramidates and Phosphorothioates as Inhibitors of Human Immunodeficiency Virus" Proc. Natl. Acad. Sci. USA, 1988, 85, 7079-7083				
	405	Agarwal, et al., "Synthesis and Enzymatic Properties of Deoxyribooligonucleotides Containing Methyl and Phenylphosphonate Linkages", Nucleic Acid Research 1979, 6, 3009-3024				
	406	Agrawal, S. et al., "Synthesis and Anti-HIV Activity of Oligoribonucleotides and Their Phosphorothioate Analogs," Ann. N.Y. Acad. Sci., 1992, 2-10				
	407	Agrawal, S. et al., Molecular Med. Today, Vol. 6, pages 72-81 (2000)				
	408	Agrawal, S., "Antisense Oligonucleotides: Towards Clinical Trials," TIBTECH, 1996, 14, 376-388				
	409	Agris, et al., "Inhibition of Vesicular Stomatitis Virus Protein Synthesis and Infection by Sequence-Specific Oligodeoxyribonucleoside Methylphosphonates", Biochemistry 1986, 25, 6268-6275				
	410	Akashi, et al., "Novel Stationary Phases for Affinity Chromatography. Nucleobase-Selective Recognition of Nucleosides and Nucleotides on Poly(9-vinyladenine)-Supported Silica Gel", Chem. Letters, 1988, 1093-1096				

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet 19 of 57

**Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivlemore
<b>Attorney Docket Number</b>	ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

411	Alberts, et al., "DNA-Cellulose Chromatography", Meth. Enzymol., 1971, 21, 198-217	
412	Allerson, C.R. et al., Abstract of the 227th ACS National Meeting, Anaheim, CA, March 28-April 1, 2004	
413	Allerson, C.R. et al., "Fully 2'-Modified Oligonucleotide Duplexes with Improved in Vitro Potency and Stability Compared to Unmodified Small Interfering RNA," J. Med. Chem., 2005, 48, 901-904	
414	Altmann, K.-H., et al., "Second generation of antisense oligonucleotides: from nuclease resistance to biological efficacy in animals," Chimia, 1996, 50, 168-176	
415	Altmann, K.H., et al., "Second-generation antisense oligonucleotides: structure-activity relationships and the design of improved signal-transduction inhibitors," Biochem. Soc. Trans., 1996, 24, 630-637	
416	Altschul, S.F. et al., "Basic Local Alignment Search Tool," J. Mol. Biol., 1990, 215, 403-410	
417	Ambros, V. et al., "A uniform system for MicroRNA annotation," RNA (2003) 9: 277-279	
418	Ambros, V. et al., "MicroRNAs and Other Tiny Endogenous RNAs in C. elegans," Curr Biol. (2003) 13: 807-818	
419	Ambros, V. et al., "MicroRNAs: Tiny Regulators with Great Potential," Cell (2001) 107: 823-826	
420	Antopolsky, M. et al., "Peptide-Oligonucleotide Phosphorothioate Conjugates with Membrane Translocation and Nuclear Localization Properties," Bioconjugate Chem. (1999) 10(4):598-606.	
421	Arar, K. et al., "Synthesis and Antiviral Activity of Peptide-Oligonucleotide Conjugates Prepared by Using Na-(Bromoacetyl)peptides," Bioconjugate Chem. (1995) 6(5):573-577.	
422	Arndt-Jovin, et al., "Covalent Attachment of DNA to Agarose", Eur. J. Biochem., 1975, 54, 411-418	
423	Arnott, S., et al., "Optimised parameters for A-DNA and B-DNA," Biochem. & Biophys. Res. Comm., 1972, 47(6), 1504-1510	
424	Arya, S. K. et al., "Alnhibition of RNA Directed DNA Polymerase of Murine Leukemia Virus by 2'-O-Alkylated Polyadenylic Acids," Biochemical and Biophysical Research Communications, 1974, 59(2), 608-615	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			<b>Application Number</b>	10/701,236	
			<b>Filing Date</b>	11-04-2003	
			<b>First Named Inventor</b>	Brenda F. Baker	
			<b>Art Unit</b>	1635	
			<b>Examiner Name</b>	Tracy Ann Vivienne	
<b>Sheet</b>	20	of	57	<b>Attorney Docket Number</b>	ISIS-5207

NON PATENT LITERATURE DOCUMENTS		
425	Arya, S. K. et al., "Inhibition of Synthesis of Murine Leukemia Virus in Cultured Cells by Polyribonucleotides and Their 2'-O-Alkyl Derivatives," Molecular Pharmacology, 1976, 12, 234-241	
426	Asseline, U. et al., "Nucleic acid-binding molecules with high affinity and base sequence specificity: Intercalating agents covalently linked to oligodeoxynucleotides," Proc. Natl. Acad. Sci USA (1984) 81: 3297-3301	
427	Astriab-Fisher et al., "Conjugates of antisense oligonucleotides with the TAT and antennapedia cell-penetrating peptides: effects on cellular uptake, binding to target sequences and biologic actions," Pharmaceutical Research (2002) 19(6): 744-754	
428	Astriab-Fisher, A. et al., "Antisense Inhibition of P-glycoprotein Expression Using Peptide-Oligonucleotide Conjugates," Biochem. Pharmacol. (2000) 60, 83-90.	
429	Baker, B. F. et al., "Oligonucleotide-europium complex conjugate designed to cleave the 5' cap structure of the ICAM-1 transcript potentiates antisense activity in cells," Nucleic Acids Res. (1999) 27(6):1547-1551.	
430	Baker, B.F., et al., "2'-O-(2-methoxy)ethyl-modified anti-intercellular adhesion molecule 1 (ICAM-1) oligonucleotides selectively increase the ICAM-1 mRNA level and inhibit formation of the ICAM-1 translation initiation complex in human umbilical vein endothelial cells," J. Biol. Chem., 1997, 272(18), 11944-12000	
431	Bartel, B. et al., "MicroRNAs: At the Root of Plant Development," Plant Physiol. (2003) 132: 709-717	
432	Bayer, E. et al., "A New Support for Polypeptide Synthesis in Columns," Tetrahedron Letters, 1970, 51, 4503-4505	
433	Beaucage et al. "The Functionalization of Oligonucleotides Via Phosphoramidite Derivatives", (1993) Tetrahedron 49(10):1925-1963	
434	Beaucage S. and Iyer, R., "Advances in the synthesis of oligonucleotides by the phosphoramidite approach", Tetrahedron Letters, 1992, 48, 2223-2311	
435	Beaucage S. and Iyer, R., "The synthesis of modified oligonucleotides by the phosphoramidite approach and their applications", Tetrahedron, 1993, 49, 6123-6194	
436	Beaucage, S.L. et al., "Deoxynucleoside Phosphoramidites-A New Class of Key Intermediates for Deoxypolynucleotide Synthesis," Tetrahedron Letts., 1981, 22, 1859-1862	

Examiner Signature	Date Considered
-----------------------	--------------------

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet 21 of 57

**Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivimore
<b>Attorney Docket Number</b>	ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

437	Bhat, et al., "A Simple and Convenient Method for the Selective N-Acylation of Cytosine Nucleosides", Nucleosides and Nucleotides, 1989, 8, 179-183	
438	Biggadike, et al., "Short convergent route to homochiral carbocyclic 2'-deoxynucleosides and carbocyclic robonucleosides", J. Chem. Soc. Chem. Commun. 1987, 1083-1084	
439	Blanks, et al., "An oligodeoxynucleotide affinity column for the isolation of sequence specific DNA binding proteins", Nucleic Acids Res., 1988, 16, 10283-10299	
440	Blomberg, P., "Control of replication of plasmid R1: the duplex between the antisense RNA, CopA, and its target, CopT, is processed specifically in vivo and in vitro by Rnase III", EMBO J., 1990, 9, 2331-2340	
441	Bollig, F. et al., "Affinity purification of ARE-binding proteins identifies poly(A)-binding protein 1 as a potential substrate in MK2-induced mRNA stabilization," Biochem. Biophys. Res. Commun. (2003) 301: 665-670	
442	Bongartz, J.-P. et al., "Improved biological activity of antisense oligonucleotides conjugated to a fusogenic peptide," Nucleic Acids Res. (1994) 22(22):4681-4688.	
443	Bonora, G. M. et al., "Antisense activity of an anti-HIV oligonucleotide conjugated to linear and branched high molecular weight polyethylene glycols," Farmaco (1998) 53:634-637.	
444	Bonora, G. M. et al., "Biological Properties of Antisense Oligonucleotides Conjugated to - Different High-Molecular Mass Poly(Ethylene Glycols)," Nucleosides Nucleotides (1999) 18(6&7):1723-1725	
445	Bonora, G.M., et al., "A liquid-phase process suitable for large-scale synthesis of phosphorothioate oligonucleotides," Organic Process Res. & Develop., 2000, 225-231	
446	Borer, et al., "Stability of ribonucleic acid double-stranded helices," J. Mol. Biol., 1974, 86, 843-853	
447	Braasch et al., "Antisense inhibition of gene expression in cells by oligonucleotides incorporating locked nucleic acids: effect of mRNA target sequence and chimera design," Nucleic Acids Research, 2002, 30, 5160-5167	
448	Braasch, D.A. et al., "Locked nucleic acid (LNA): fine-tuning the recognition of DNA and RNA," Chem Biol, 2001, 8, 1-7	
449	Braasch, D.A. et al., "RNA Interference in Mammalian Cells by Chemically-Modified RNA," Biochemistry, 2003, 42, 7967-7975	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

22

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

- |     |  |
|-----|--|
| 450 | Braasch, D.A., et al., "Novel antisense and peptide nucleic acid strategies for controlling gene expression," Biochemistry, April 9, 2002, 41(14), 4503-4510                                 |
| 451 | Branch, A., "A Good Antisense is Hard to Find," TIBS, 1998, 23, 45-50  |
| 452 | Branda et al., J. Lab. Clin. Med., 1996, 128, 329-338  |
| 453 | Branden, L. J. et al., "A peptide nucleic acid-nuclear localization signal fusion that mediates nuclear transport of DNA," Nature Biotech (1999) 17:784-787.                                 |
| 454 | Brazma, A., et al., "Gene expression data analysis," FEBS Lett., 2000, 480, 17-24  |
| 455 | Brill, et al., "Synthesis of Oligodeoxynucleoside Phosphorodithioates Via Thioamidites", J. Am. Chem. Soc. 1989, 111, 2321-2322  |
| 456 | Brown-Driver et al., "Inhibition of Translation of Hepatitis C Virus RNA by 2'-Modified Antisense Oligonucleotides," Antisense Nucleic Acid Drug Dev. (1999) 9(2): 145-154                   |
| 457 | Buhr, C.A. et al., "Oligodeoxynucleotides containing C-7 propyne analogs of 7-deaza-2'-deoxyguanosine and 7-deaza-2'-deoxyadenosine," Nucleic Acids Research, 1996, 24(15), 2974-2980        |
| 458 | Bunemann, et al., Immobilization of denatured DNA to macroporous supports: I. Efficiency of different coupling procedures", Nucleic Acids Res., 1982, 10, 7163-7180                          |
| 459 | Bunemann, H., "Immobilization of denatured DNA to macroporous supports: II. Steric and kinetic parameters of heterogeneous hybridization reactions", Nucleic Acids Res., 1982, 10, 7181-7196 |
| 460 | Butke, et al., "Facile synthesis of 2'-amino-2-deoxynucleoside from the corresponding arabino derivative," Nucleic Acid Chemistry, 1986, Part Three, 149-152                                 |
| 461 | Butler, M. et al., "Specific Inhibition of PTEN Expression Reverses Hyperglycemia in Diabetic Mice," Diabetes, 2002, 51, 1028-1034   |
| 462 | Caplen et al., "dsRNA-mediated gene silencing in cultured Drosophila cells: a tissue culture model for the analysis of RNA interference," GENE (2000) 252: 95-105                            |
| 463 | Carmell, M.A. et al., "the argonaute family: tentacles that reach into RNAi, developmental control, stem cell maintenance, and tumorigenesis," Genes and Development, 2002, 16, 2733-2742    |

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				<b>Application Number</b>	10/701,236
				<b>Filing Date</b>	11-04-2003
				<b>First Named Inventor</b>	Brenda F. Baker
				<b>Art Unit</b>	1635
				<b>Examiner Name</b>	Tracy Ann Vivimore
<b>Sheet</b>	<b>23</b>	<b>of</b>	<b>57</b>	<b>Attorney Docket Number</b>	ISIS-5207

NON PATENT LITERATURE DOCUMENTS		
464	Carulli, J.P., et al., "High throughput analysis of differential gene expression," J. Cellular Biochem. Suppl., 1998, 30(31), 286-296	
465	Caruthers, M., "Synthesis of Oligonucleotides and Oligonucleotide Analogues," in "Oligonucleotides. Antisense Inhibitors of Gene Expression.", J.S. Cohen, Ed., CRC Press, Inc., 7-24, (1989)	
466	Castle, et al., "Imidazo[4, 5-D]pyridazines. I. Synthesis of 4,7-disubstituted derivatives", Journal of Organic Chemistry, 1958, 23, 1534-1538	
467	Cazalla, D. et al., "Nuclear Export and Retention Signals in the RS Domain of SR Proteins," Mol. Cell. Biol. (2002) 22(19):6871-6882.	
468	Cazenave, C. et al., "Enzymatic amplification of translation inhibition of rabbit $\beta$ -globin mRNA mediated by anti-messenger oligodeoxynucleotides covalently linked to intercalating agents", Nucl. Acids Res., 1987, 15, 4717-4736	
469	Celis, J.E., et al., "Gene expression profiling: monitoring transcription and translation production using DNA microarrays and proteomics," FEBS Lett., 2000, 480, 2-16	
470	Cerutti, H., "RNA interference: traveling in the cell and gaining functions?" Trends in Genetics (2003) 19(1): 39-46	
471	Chaloin, L. et al., "Design of Carrier Peptide-Oligonucleotide Conjugates with Rapid Membrane Translocation and Nuclear Localization Properties," Biochem. Biophys. Res. Commun. (1998) 243:601-608	
472	Chen and Wu, "Studies on Fluoroalkylation and Fluoroalkoxylation. Part 33. Direct Trifluoromethylation of Aryl Halides with Fluorosulphonyldifluoromethyl Iodide in the Presence of Copper: an Electron Transfer Induced Process," J. Chem. Soc., Perkin Transactions, 1989, 1, 2385-2387.	
473	Chiang et al., "Antisense Oligonucleotides Inhibit Intercellular Adhesion Molecule 1 Expression by Two Distinct Mechanisms," J. Biol. Chem., 1991, 266, 18162-18171	
474	Chirila, T.V. et al., Biomaterials, Vol. 23, pages 321-342 (2002)	
475	Chiu et al., "siRNA function in RNAi: a chemical modification analysis," RNA, 2003, 9, 1034-1048	
476	Chiu, Y.-L. et al., "RNAi in human cells: basic structural and functional features of small interfering RNA," Molecular Cell, September 2002, 10, 549-561	

<b>Examiner Signature</b>	<b>Date Considered</b>
---------------------------	------------------------

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet 24 of 57

**Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivlemore
<b>Attorney Docket Number</b>	ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

477	Chladek, et al., "Facile Synthesis of 2'Amino-2'Deoxyadenosine," J. Carbohydrates, Nucleosides & Nucleotides, 1980, 7, 63-75.	
478	Chodosh, et al., "A Single Polypeptide Possesses the Binding and Transcription Activities of the Adenovirus Major Late Transcription Factor", Mol. Cell. Biol., 1986, 6, 4723-4733	
479	Choung, S. et al., "Chemical modification of siRNAs to improve serum stability without loss of efficacy," Biochemical and Biophysical Research Communications, 2006, 342, 919-927	
480	Christofferson et al., "Ribozymes as human therapeutic agents", J. Med. Chem., 1995, 38(12), 2023-2037	
481	Cogoni, C. et al., "Post-transcriptional gene silencing across kingdoms," Curr. Opin. Genet Dev., 2000, 10(6), 638-643	
482	Cohen, G. L. et al., "Sequence Dependent Binding of cis-Dichlorodiammineplatinum(II) to DNA," J. Am. Chem. Soc. (1980) 102(7), 2487-2488.	
483	Concise Encyclopedia of Polymer Science and Engineering, pgs. 858-859, Kroschwitz, J.I., Ed., John Wiley & Sons, 1990	
484	Constant et al., "Heterodimeric Molecules Including Nucleic Acid Bases and 9-Aminoacridine Spectroscopic Studies, Conformations, and Interactions with DNA", Biochemistry, 1988, 27, 3997-4003	
485	Conte, M.R., et al., "Conformational properties and thermodynamics of the RNA duplex r(CGCAAAUUUGCG)2: comparison with the DNA analogue d(CGCAAAATTGCG)2," Nucleic Acids Res., 1997, 25(13), 2627-2634	
486	Copy of PCT International Search Report dated January 24, 2005 (PCTUS03/35087)	
487	Corey, D. R. et al., "Generation of a Hybrid Sequence-Specific Single-Stranded Deoxyribonuclease," Science (1987) 238:1401-1403.	
488	Corey, D. R. et al., "Sequence-Selective Hydrolysis of Duplex DNA by an Oligonucleotide-Directed Nuclease," J. Am. Chem. Soc. (1989) 111(22):8523-8525.	
489	Corey, D. R., "48000-fold Acceleration of Hybridization by Chemically Modified Oligonucleotides," J. Am. Chem. Soc. (1995) 117(36):9373-9374.	
490	Cornell, W. D. et al., "A Second Generation Force Field for the Simulation of Proteins, Nucleic Acids, and Organic Molecules," J. Am. Chem. Soc., 1995, 117, 5179-5197	

Examiner  
SignatureDate  
Considered



Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				<b>Application Number</b>	10/701,236
				<b>Filing Date</b>	11-04-2003
				<b>First Named Inventor</b>	Brenda F. Baker
				<b>Art Unit</b>	1635
				<b>Examiner Name</b>	Tracy Ann Vivimore
<b>Sheet</b>	25	of	57	<b>Attorney Docket Number</b>	ISIS-5207

NON PATENT LITERATURE DOCUMENTS		
491	Cossum, P.A. et al., "Disposition of the 14C-Labeled Phosphorothioate Oligonucleotide ISIS 2105 after Intravenous Administration to Rats," J. Pharmacol. Exp. Ther., 1993, 267(3), 1181-1190	
492	Couzin, J., "Small TNAs Make Big Splash," Science (2002) 298: 2296-2297	
493	Crawford, J.M., "Role of Vesicle-Mediated Transport Pathways in Hepatocellular Bile Secretion," Semin. Liver Dis., 1996, 16(2), 169-189	
494	Crooke, et al., "Kinetic characteristics of Escherichia coli RNase H1: cleavage of various antisense oligonucleotide-RNA duplexes", Biochem. J., 1995, 312, 599-608	
495	Crooke, et al., "Pharmacokinetic Properties of Several Novel Oligonucleotide Analogs in mice", J. Pharmacol. Exp. Ther., 1996, 277, 923-937	
496	Crooke, S.T. and Bennett, C.F., "Progress in Antisense Oligonucleotide Therapeutics", Annu. Rev. Pharmacol. Toxicol., 1996, 36, 107-129	
497	Crooke, S.T., Antisense Research & Application, Chapter 1, Pages 1-50, Publ. Springer-Verlag, Ed. S.T. Crooke (1998).	
498	Cummins, L.L. et al., "Characterization of fully 2'-modified oligoribonucleotide heter- and homoduplex hybridization and nuclease sensitivity," Nucleic Acids Research, 1995, 23(11), 2019-2024	
499	Dagle, et al., "Pathways of Degradation and Mechanism of Action of Antisense Oligonucleotides in Xenopus laevis Embryos", Antisense Res. And Dev., 1991, 1, 11-20	
500	Dagle, et al., "Physical properties of oligonucleotides containing phosphoramidate-modified internucleoside linkages", Nucleic Acids Research, 1991, 19, 1805-1810	
501	Dagle, et al., "Targeted degradation of mRNA in Xenopus oocytes and embryos directed by modified oligonucleotides: studies of An2 and cyclin in embryogenesis", Nucleic Acids Research, 1990, 18, 4751-4757	
502	Dahl, B.H. et al., "A Highly Reactive, Odourless Substitute for Thiphenol/Triethylmaine as a Deprotection Reagent in the Synthesis of Oligonucleotides and their Analogues," Acta Chem. Scand., 1990, 44, 639-641	
503	Dake, et al., "Purification and Properties of the Major Nuclease from Mitochondria of Saccharomyces cerevisiae", J. Biol. Chem., 1988, 263, 7691-7702	

<b>Examiner Signature</b>	<b>Date Considered</b>
-------------------------------	----------------------------

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

26

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

504	Damha, et al., "Solution and solid phase chemical synthesis of arabinonucleotides", Can J. Chem., 1989, 831-839
505	Dande, P. et al., Abstract from The 227th ACS National Meeting, Anaheim, CA, March 28-April 1, 2004
506	Day, et al., "Immobilization of polynucleotides on magnetic particles", Biochem. J., 1991, 278, 735-740
507	De las Heras, et al., "3'-C-Cyano-3'-Deoxythymidine," Tetrahedron Letters, 1988, 29, 941-944
508	De Mesmeker, et al., "Antisense Oligonucleotides", Acc. Chem. Res., 1995, 28, 366-374
509	DeClercq, E. et al., "Influence of various 2- and 2'-substituted polyadenyl acids on murine leukemia virus reverse transcriptase," Cancer Letters, 1979, 7, 27-37
510	Dellinger, D.J. et al., "Solid-Phase Chemical Synthesis of Phosphonoacetate and Thiophosphonoacetate Oligodeoxynucleotides," J. Am. Chem. Soc., 2003, 125(4), 940-950
511	Denny, W.A., "DNA-intercalating ligands as anti-cancer drugs: prospects for future design," Anti-Cancer Drug Design, 1989, 4, 241-263
512	Dignam, et al., "Accurate transcription initiation by RNA polymerase II in a soluble extract from isolated mammalian nuclei," Nucleic Acids Res., 1983, 11, 1475-1489
513	Divakar, et al., "Approaches to the Synthesis of 2'-Thio Analogues of Pyrimidine Ribosides", J. Chem. Soc., Perkins Trans., I, 1990, 969-974
514	Divakar, et al., "Reaction Between 2,2'-Anhydro-1-β-D-arabinofuranosyluracil and Thiolate Ions", J. Chem. Soc., Perkins Trans. I, 1982, 1625-1628
515	Dreyer, et al., "Sequence-specific cleavage of single-stranded DNA: Oligodeoxynucleotide-EDTA-Fe(II)", Proc. Natl. Acad. Sci. USA, 1985, 82, 968-972
516	Drmanac, et al., "DNA Sequence Determination by Hybridization: A Strategy for Efficient Large-Scale Sequencing", Science, 1993, 260, 1649-1652
517	Duff, R. J. et al., "[17] Intrabody Tissue-Specific Delivery of Antisense Conjugates in Animals: Ligand-Linker-Antisense Oligomer Conjugates," Methods Enzymol. (2000) 313:297-321.
518	Duncan, et al., "Affinity Chromatography of a Sequence-Specific DNA Binding Protein Using Teflon-Linked Oligonucleotides", Anal. Biochem., 1988, 169, 104-108

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)***Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivimore
<b>Attorney Docket Number</b>	ISIS-5207

Sheet 27 of 57

**NON PATENT LITERATURE DOCUMENTS**

519	Dunn, J.J. and Studier, F.W., "Effect of RNAase III Cleavage on Translation of Bacteriophage T7 Messenger RNAs", J. Mol. Biol., 1975, 99, 487-499	
520	Eckstein, et al., "Polynucleotides Containing 2'Chloro-2'Deoxyribose", Biochemistry, 1972, 11, 4336-4344	
521	Eddy, S.R., "Non-Coding RNA Genes and the Modern RNA World," Nature Rev. Genetics (2001) 2: 919-929	
522	Eder, P.S. and Walder, J.A., "Ribonuclease H from K562 Human Erythroleukemia Cells", J. Biol. Chem., 1991, 266, 6472-6479	
523	Efimov, V. A. et al., "Synthesis of Polyethylene Glycol - Oligonucleotide Conjugates," Bloorg. Khim. (1993) 19(8):800-804.	
524	Egli, M. et al., "RNA Hydration: A Detailed Look," Biochemistry, 1996, 35, 8489-8494	
525	Elayadi, A.N. et al., "Application of PNA and LNA oligomers to chemotherapy," Curr. Opin. Investig. Drugs, 2001, 2(4), 558-561	
526	Elela, et al., "RNase III Cleaves Eukaryotic Preribosomal RNA at a U3 snoRNP-Dependent Site", Cell, 1996, 85, 115-124	
527	Elmén, J. et al., "Locked nucleic acid (LNA) mediated improvements in siRNA stability and functionality," Nucleic Acids Res. 2005, 33(1), 439-447	
528	Englisch, U. And Gauss, D.H., "Chemically Modified Oligonucleotides as Probes and Inhibitors", Angewandte Chemie, International Edition Engl., 1991, 30, 613-629	
529	EP Supplementary Search Report for EP 03716922 dated May 12, 2006	
530	Fahy, et al., "Design and synthesis of polyacrylamide-based oligonucleotide supports for use in nucleic acid diagnostics", Nucl. Acids Res., 1993, 21, 1819-1826	
531	Faria, M. et al., "Phosphoramidate oligonucleotides as potent antisense molecules in cells and in vivo," Nature Biotech., 2001, 19, 40-44	
532	Fazakerley, G.V., et al., "A→Z transition in the synthetic hexanucleotide (dCdGfl) <sub>3</sub> ," FEBS, 1985, 182(2), 365-369	
533	Fedoroff, O.Y. et al., "Structure of a DNA:RNA Hybrid Duplex," J. Mol. Biol., 1993, 233, 509-523	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

28

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

- |     |  |
|-----|--|
| 534 | Fire et al., "RNA-triggered gene silencing," TIG (1999) 15(9): 358-363   |
| 535 | Fire et al., Nature, 1998, 391, 806-811  |
| 536 | Firestone, R. A., "Low-Density Lipoprotein as a Vehicle for Targeting Antitumor Compounds to Cancer Cells," Bioconjugate Chem. (1994) 105-113.   |
| 537 | Fishel, et al., "Z-DNA Affinity Chromatography", Methods Enzymol., 1990, 184, 328-342  |
| 538 | Flanagan, W. M. et al., "A cytosine analog that confers enhanced potency to antisense oligonucleotides," Proc. Natl. Acad. Sci. USA, Mar. 1999, 96, 3513-3518  |
| 539 | Flanagan, W.M. et al., "Cellular penetration and antisense activity by a phenoxazine-substituted heptanucleotide," Nature Biotechnol. (1999) 17(1): 48-52  |
| 540 | Fluiter, K. et al., "In vivo tumor growth inhibition and biodistribution studies of locked nucleic acids (LNA) antisense oligonucleotides," Nucleic Acids Res., 2003, 31(3), 953-962                   |
| 541 | Fodor, et al., "Light-Directed, Spatially Addressable Parallel Chemical Synthesis", Science, 1991, 251, 767-773  |
| 542 | Fox, et al., "Nucleosides. XVIII. Synthesis of 2'-Fluorothymidine, 2'-Fluorodeoxyuridine, and Other 2'-Halogeno-2'-Deoxy Nucleosides 12", J Org. Chem., 1964, 29, 558-564                              |
| 543 | Francis, A.W. et al., "Probing the Requirements for Recognition and Catalysis in Fpg and MutY with Nonpolar Adenine Isosteres," J. Am. Chem. Soc. (2003) 125(52): 16235-16242                          |
| 544 | Fraser, A., et al., "Synthesis and conformational properties of 2'-deoxy-2'-methylthiopyrimidine and -purine nucleosides: potential antisense applications," J. Heterocycl. Chem., 1993, 30, 1277-1287 |
| 545 | Fraser, A.G. et al., "Functional genomic analysis of C. elegans chromosome 1 by systemic RNA interference," Nature, 2000, 408, 325-330   |
| 546 | Freier, S. M. et al., "The ups and downs of nucleic acid duplex stability: structure stability studies on chemically-modified DNA:RNA duplexes," Nucleic Acids Research, 1997, 25(22), 4429-4443       |
| 547 | Freskos, "Synthesis of 2'Deoxypyrimidine Nucleosides Via Copper (I) Iodine Catalysis," Nucleosides & Nucleotides, 1989, 8, 1075, 1076  |
| 548 | Frieden, M. et al., "Expanding the design horizon of antisense oligonucleotides with alpha-L-LNA," Nucleic Acids Res., 2003, 31(21), 6365-6372   |

**Examiner  
Signature****Date  
Considered**

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

29

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivimore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

549	Fromageot, H.P.M. et al., "The Synthesis of Oligonucleotides," Tetrahedron, 1967, 23, 2315-2331	
550	Fuchs, B. et al., "Identification of Differentially Expressed Genes by Mutually Subtracted RNA Fingerprinting," Anal. Biochem., 2000, 286, 91-98	
551	Fusi, et al., "Ribonucleases from the extreme thermophilic archaeobacterium S. Solfataricus", Eur. J. Biochem., 1993, 16, 305-310	
552	Gabrielsen, et al., "AMagnetic DNA affinity purification of yeast transcription factor T-a new purification principle for the ultrarapid isolation of near homogeneous factor", Nucleic Acids Research, 1989, 17, 6253-6267	
553	Gaffney, et al., "A New Strategy for the Protection of oxyguanosine During Oligonucleotide Synthesis," Tetrahedron Letters, 1982, 23, 2257-2260	
554	Gait, M.J. et al., "Application of chemically synthesized RNA," RNA: Protein Interactions (1998) Smith (ed.), pp. 1-36	
555	Gait, M.J., "Oligoribonucleotides, Antisense Research and Applications, 1993, Crooke, S.T. and Lebleu, B. (eds.), CRC Press, Boca Raton, pp. 289-301	
556	Gallo, M. et al., "2'-C-Methyluridine phosphoramidite: a new building block for the preparation of RNA analogues carrying the 2'-hydroxyl group," Tetrahedron, 2001, 57(27), 5707-5713	
557	Gao, J. et al., "Expanded-Size Bases in Naturally Sized DNA: Evaluation of Steric Effects in Watson-Crick Pairing," J. Am. Chem. Soc. (2004) 126(38): 11826-11831	
558	Gbenle, "Simultaneous Isolation of Cytoplasmic Endoribonuclease and Exoribonuclease of Trypanosoma Brucei", Mol. Biochem. Parasitol., 1985, 15, 37-47	
559	Gbenle, "Trypanosoma brucei: Calcium-Dependent Endoribonuclease is Associated with Inhibitor Protein", Exp. Parasitol., 1990, 71, 432-438	
560	Geary, R.S. et al., "Pharmacokinetic Properties of 2'-O-(2-Methoxyethyl)-Modified Oligonucleotide Analogs in Rats," J. Pharmacol. Exp. Therap., 1998, 296(3), 890-897	
561	Gerdes, K., et al., "Mechanism of Killer Gene Activation. Antisense RNA-dependent RNase III Cleavage Ensures Rapid Turn-over of the Stable-Hok, SrmB and PndA Effector Messenger RNAs", J. Mol. Biol., 1992, 226, 637-649	
562	Gingeras, et al., "Hybridization properties of immobilized nucleic acids", Nucl. Acids Res., 1987, 15, 5373-5391	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet 30 of 57

**Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivlemore
<b>Attorney Docket Number</b>	ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

563	Going, J.J., et al., "Molecular pathology and future developments," Eur. J. Cancer, 1999, 35(14), 1895-1904	
564	Goldkorn, T. And Prockop, D.J., "A simple and efficient enzymatic method for covalent attachment of DNA to cellulose. Application for hybridization-restriction analysis and for in vitro synthesis of DNA probes", Nucleic Acids Res., 1986, 14, 9171-9191	
565	Gonzalez, C. et al., "Structure and Dynamics of a DNA-RNA Hybrid Duplex with a Chiral Phosphorothioate Moiety: NMR and Molecular Dynamics with Conventional and Time-Averaged Restraints," Biochemistry, 1995, 34, 4969-4982	
566	Goodchild, et al., "Conjugates of Oligonucleotides and Modified Oligonucleotides: A Review of their Synthesis and Properties", Bioconjugate Chem., 1990, 1(3), 165-187	
567	Gorlach, M. et al., "The mRNA Poly(A)-Binding Protein: Localization, Abundance, and RNABinding Specificity," Exp. Cells Res. (1994) 211:400-407	
568	Goss, T.A. and Bard, M., "High-performance affinity chromatography of DNA", J. Chromatogr., 1990, 508, 279-287	
569	Graham, et al., "Tritium Labeling of Antisense Oligonucleotides by Exchange with Tritiated Water," Nucleic Acids. Res., 1993, 16, 3737-3743	
570	Graham, M.J. et al., "In Vivo Distribution and Metabolism of a Phosphorothioate Oligonucleotide within Rat Liver after Intravenous Administration," J. Pharmacol. Exp. Therap., 1998, 286(1), 447-458	
571	Gravert, D.J., et al., "Organic synthesis on soluble polymer supports," Chem. Rev., 1997, 97, 489-509	
572	Griffey, R.H. et al., "2'-O-Aminopropyl Ribonucleotides: A Zwitterionic Modification that Enhances the Exonuclease Resistance and Biological Activity of Antisense Oligonucleotides," J. Med. Chem., 1996, 39(26), 5100-5109	
573	Griffin, B.E. et al., "The Synthesis of Oligoribonucleotides," Tetrahedron, 1967, 23, 2301-2313	
574	Grishok, A. et al., "Genetic Requirements for Inheritance of RNAi in C. elegans," Science, 2000, 287, 2494-2497	
575	Grünweller, A. et al., "Comparison of different antisense strategies in mammalian cells using locked nucleic acids, 2'-O-methyl RNA, phosphorothioates and small interfering RNA," Nucleic Acids Research, 2003, 31(12), 3185-3193	

Examiner  
SignatureDate  
Considered

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	31	of	57
-------	----	----	----

**Complete if Known**

Application Number	10/701,236
Filing Date	11-04-2003
First Named Inventor	Brenda F. Baker
Art Unit	1635
Examiner Name	Tracy Ann Vivlemore
Attorney Docket Number	ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

576	Gryaznov, S. et al., "Oligodeoxynucleotide N3'P5' Phosphoramidates: Synthesis and Hybridization Properties," J. Am. Chem. Soc., 1994, 116(7), 3143-3144
577	Guckian, K.M. et al., "Structure and Base Pairing Properties of a Replicable Nonpolar Isostere for Deoxyadenosine," J Org Chem (1998) 63(26);9652-9656
578	Guillerm, D. et al., "Synthesis of 4'-fluoroadenosine as an inhibitor of S-adenosyl-L-homocysteine hydrolase," Bioorganic & Medicinal Chemistry Letters, 1995, 5(14), 1455-1460
579	Guo, et al., "Direct fluorescence analysis of genetic polymorphisms by hybridization with oligonucleotide arrays on glass supports", Nucl. Acids Res., 1994, 22, 5456-5465
580	Guo, S. et al., "par-1, a Gene Required for Establishing Polarity in C. elegans Embryos, Encodes a Putative Ser/Thr Kinase That is Asymmetrically Distributed," Cell, 1995, 81(4), 611-620
581	Gura, T., "A silence that speaks volumes," Nature, 2000, 404, 804-808
582	Guschlbauer, et al., "Nucleoside conformation is Determined by the Electronegativity of the Sugar Substituent," Nucleic Acids Res., 1980, 8, 1421-1433
583	Guschlbauer, W. et al., "Poly-2'-deoxy-2'-fluoro-cytidylic acid: enzymatic synthesis, spectroscopic characterization and interaction with poly-inosinic acid," Nucleic Acid Research, 1977, 4(6), 1933-1943
584	Guschlbauer, W., et al., "Use of 2'-deoxy-2'-fluoro-nucleosides in the study of polynucleotide conformation: a progress report," Nucleic Acid Research Symposium Series, 1982, 11, 113-116
585	Gutierrez, A.J. et al., "Antisense Gene Inhibition by C-5 Substituted Deoxyuridine-Containing Oligodeoxynucleotides," Biochemistry, 1997, 36(4), 743-748
586	Guzaev, A. et al., "Conjugation of Oligonucleotides Via an Electrophilic Tether: N-Chloroacetarnidohexyl Phosphoramidite Reagent," Bioorg. Med. Chem. lett. (1998) 8:3671-3676.
587	Haeuptle and Dobberstein, "Translation arrest by oligonucleotides complementary to mRNA coding sequences yields polypeptides of predetermined length", Nucleic Acids Res., 1986, 14, 1427-1448
588	Hakimelahi, G.H. et al., "High Yield Selective 3'-Silylation of Ribonucleosides," Tetrahedron Lett., 1981, 22(52), 5243-5246

Examiner Signature	Date Considered
-----------------------	--------------------

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

32

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivimore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

589	Hall, J. et al., "Efficient sequence-specific cleavage of RNA using novel europium complexes conjugated to oligonucleotides," Chem. Biol. (1994) 1(3):185-190.	
590	Hamada et al., "Effects on RNA Interference in Gene Expression (RNAi) in Cultured Mammalian Cells of Mismatches and the Introduction of Chemical Modifications at the 3' Ends of siRNAs," Antisense and Nucleic Acid Drug Development (2002) 12:301-309	
591	Hamilton et al., "A species of small antisense RNA in posttranscriptional gene silencing in plants," Science (1999) 286 (5441): 950-952	
592	Hansske, et al., "2' and 3'-ketonucleosides and their arabino and XYLO reduction products," Tetrahedron, 1984, 40, 125-135	
593	Hariton-Gazal, E. et al., "Targeting of Nonkaryophilic Cell-Permeable Peptides into the Nuclei of Intact Cells by Covalently Attached Nuclear Localization Signals," Biochemistry (2002) 41(29):9208-9214.	
594	Harry O'Kuru, R.E. et al., "A Short, Flexible Route toward 2'-C-Branched Ribonucleosides," J. Org. Chem., 1997, 62(6), 1754-1759	
595	Heasman, J., "Morpholino Oligos: Making Sense of Antisense?" Dev. Biol., 2002, 243, 209-214	
596	Henderson, B. R. et al., "A Comparison of the Activity, Sequence Specificity, and CRM1-Dependence of Different Nuclear Export Signals," Exp. Cell Res. (2000) 256:213-224.	
597	Hertel, et al., "Synthesis of 2-deoxy-2,2-difluoro-D-ribose and 2-deoxy-2,2-difluoro-D-ribofuranosyl nucleosides," J. Org. Chem., 1988, 53, 2406-2409.	
598	Hill, F. et al., "Polymerase recognition of synthetic oligodeoxyribonucleotides incorporating degenerate pyrimidine and purine bases," Proc. Natl. Acad. Sci. USA, 1998, 95, 4258-4263	
599	Hobbs, J. et al., "Poly 2'-Deoxy-2'-Aminouridylic Acid," Biochem. Biophys. Res. Commun., 1972, 46(4), 1509-1515	
600	Hobbs, J. et al., "Polynucleotides Containing 2'-Amino 2'-deoxyribose and 2'-Azido-2'-deoxyribose," Biochem., 1973, 12, 5138-5145	
601	Hobbs, J. et al., "Polynucleotides Containing 2'-Chloro-2'-deoxyribose," Biochem., Eckstein et al., Ed., 1972, 11, 4336-4344	
602	Hoffman, K., "Imidazole and its Derivatives" in The Chemistry of Heterocyclic Compounds, Weissberger, A., Ed., Interscience Publishers, Inc., New York, 1953, 447	

Examiner  
SignatureDate  
Considered



Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet 33 of 57

**Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivimore
<b>Attorney Docket Number</b>	ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

603	Holen, T., et al., "Similar behaviour of single-strand and double-strand siRNAs suggests they act through a common RNAi pathway," Nucleic Acids Res., 2003, 31(9), 2401-2407	
604	Hornbeck, P. et al., Enzyme-Linked Immunosorbent Assays (ELIASE)," Curr. Protocols Mol. Biol., 1991, John Wiley & Sons, pp. 11.2.1-11.2.22	
605	Hornung, V. et al., "Sequence-specific potent induction of IFN- $\alpha$ by short interfering RNA in plasmacytoid dendritic cells through TLR7," Nature Med., 2005, 11(3), 263-270	
606	Horton, N. C. et al., "The Structure of an RNA/DNA Hybrid: A Substrate of the Ribonuclease Activity of HIV-1 Reverse Transcriptase," J. Mol. Biol., 1996, 264, 521-533	
607	Huang, L. et al., "Oligonucleotide conjugates of Eu(III) tetraazamacrocycles with pendent alcohol and amide groups promote sequence-specific RNA cleavage," J Biol Inorg. Chem (2000) 5:85-92.	
608	Huh, N. et al., "Design, Synthesis, and Evaluation of Mitomycin-Tethered Phosphorothioate Oligodeoxynucleotides," Bioconjugate Chem. (1996) 7:659-669.	
609	Hunter, "Genetics: a touch of elegance with RNAi," Current Biology, Current Science (1999) 9(12): R440-R442	
610	Hyrup, B. And Nielsen, P., "Peptide Nucleic Acids (PNA): Synthesis, Properties and Potential Applications", Bioorganic & Med. Chem., 1996, 4, 5-23	
611	Ikehara, et al, "Studies of Nucleosides and Nucleotides-LXV" Purine Cyclonucleosides-26 A Versatile Method for the Synthesis of Purine O-Cyclo-Nucleosides. The First Synthesis of 8,2'-Anhydro-8-Oxy 9-B-D-Arabinofuranosylguanine," Tetrahedron, 1975, 31, 1369-1372	
612	Ikehara, et al, "Studies of Nucleosides and Nucleotides-LXXXVII. 1. Purine Cyclonucleosides. XLII. Synthesis of 2'-deoxy-2'-fluorofuranaosine," Chem. And Pharm. Bull., 1981, 29, 1034-1038.	
613	Ikehara, et al. "Purine cyclonucleosides. (43). Synthesis and properties of 2'-halogen-2'-deoxyguanosines 1," Chem and Pharm Bull., 1981, 29, 3281-3285	
614	Ikehara, et al., "A Linear Relationship Between Electronegativity of 2'-Substituents and Conformation of Adenine Nucleosides," Tetrahedron Letters, 1979, 42, 4073-4076	
615	Ikehara, et al., "Improved Synthesis of 2'-fluoro-2'-deoxyadenosine and Synthesis and Carbon-13 NMR Spectrum of its 3',5'-cyclic Phosphate Derivative," Nucleosides & Nucleotides, 1983, 2, 373-385	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

34

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

616	Ikehara, et al., "Polynucleotides. L. synthesis and properties of poly (2'chloro-2'-deoxyadenylic acid) and poly (2'-bromo-2'-deoxyadenylic acid)", Nucleic Acids Res., 1978, 4, 4249-4260
617	Ikehara, et al., "Polynucleotides. LII. Synthesis and properties of poly (2'-deox-2'-fluoroadenylic acid)," Nucleic Acids Research, 1978, 5, 1877-1887
618	Ikehara, et al., "Polynucleotides. LVI. Synthesis and Properties of Poly(2'-deoxy-2'-fluorinosinic Acid)", Nucleic Acids Res., 1978, 5, 3315-3324
619	Ikehara, et al., "Purine 8-Cyclonucleosides," Accts. Chem Res., 1969, 2, 47-53
620	Ikehara, et al., "Studies of Nucleosides and Nucleotides-LXXIV1 Purine Cyclonucleosides-34 A New Method for the Synthesis of 2'-substituted 2'-deoxyadenosines," Tetrahedron, 1978, 34, 1133-1138
621	Ikehara, et al., "Studies of Nucleosides and Nucleotides-LXXII. 1 Cyclonucleosides. (39). 2 Synthesis and properties of 2'halogen-2'-deoxyadenosines," Chem. Pharm. Bull., 1978, 26, 2449-2453
622	Ikehara, M., " 2'-substituted 2'-deoxypurine nucleotides their conformation and properties," Heterocycles, 1984, 21(1), 75-90
623	Imazawa, et al., "Nucleosides and nucleotides. XII.1) Synthesis and properties of 2'-deoxy-2'-mercaptouridine and its derivatives", Chem. Pharm. Bull., 1975, 23, 604-610
624	Inoue et al., "Sequence dependent hydrolysis of RNA using modified oligonucleotide splints and RNase H", FEBS Lett., 1987, 215(2), 327-330
625	Inoue, et al., "Synthesis and hybridization studies on two complementary nona(2'-O-methyl) ribonucleotides", Nucleic Acid Res., 1987, 15, 6131-6148
626	International Search Report Dated August 23, 2004 for International Application No. PCT/US03/09808
627	International Search Report dated March 24, 2005 for International Application No. PCT/US03/35088
628	International Search Report dated November 18, 2004 for International Application No. PCT/US03/29294
629	Jacobson, K.A. et al., "Methanocarba Analogues of Purine Nucleosides as Potent and Selective Adenosine Receptor Agonists," J. Med. Chem., 2000, 43(11), 2196-2203

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			<b>Application Number</b>	10/701,236	
			<b>Filing Date</b>	11-04-2003	
			<b>First Named Inventor</b>	Brenda F. Baker	
			<b>Art Unit</b>	1635	
			<b>Examiner Name</b>	Tracy Ann Vivlemore	
<b>Sheet</b>	35	of	57	<b>Attorney Docket Number</b>	ISIS-5207

NON PATENT LITERATURE DOCUMENTS			
630	Jäger, A. et al., "Oligonucleotide N-alkylphosphoramidates: Synthesis and binding to polynucleotides", Biochemistry 1988, 27, 7237-7246		
631	Janik, B., et al., "Synthesis and Properties of Poly 2'-Fluoro-2'-Deoxyuridylic Acid," Biochem. Biophys. Res. Comm., 1972, 46(3), 1153-1160		
632	Jarvi, et al., "Synthesis and biological evaluation of dideoxynucleosides containing a difluoromethylene unit", Nucleosides & Nucleotides, 1989, 8, 1111-1114		
633	Jaschke, A. et al., "Synthesis and properties of oligodeoxyribonucleotide-polyethyleneglycol conjugates," Nucleic Acids Res. (1994) 22(22):4810-4817.		
634	Jayaraman, et al., "Selective Inhibition of Escherichia Coli Protein Synthesis and Growth by Nonionic Oligonucleotides Complementary to the 3' end of 16S rRNA", Proc. Natl. Acad. Sci. USA 1981, 78(3), 1537-1541		
635	Jen et al., "Suppression of Gene Expression by Targeted Disruption of Messenger RNA: Available Options and Current Strategies," Stem Cells, 2000, 18, 307-319		
636	Jones, et al., "4'-substituted nucleosides. 5. hydroxymethylation of nucleoside 5'-aldehydes", J. Org. Chem., 1979, 44, 1309-1317		
637	Jones, et al., "Transient protection: Efficient one-flask synthesis of protected deoxynucleosides", J. Am. Chem. Soc., 1982, 104, 1316-1319		
638	Jones, L.J. et al., "RNA Quantitation by Fluorescence-Based Solution Assay: RiboGreen Reagent Characterization," Anal. Biochem., 1998, 265, 368-374		
639	Jones, S.S. et al., "Migration of t-Butyldimethylsilyl Protecting Groups," J.C.S. Perkin 1, 1979, 2762-2764		
640	Jorgensen, R. A. et al., "Chalcone synthase cosuppression phenotypes in petunia flowers: comparison of sense vs. antisense constructs and single-copy vs. complex T-DNA sequences," Plant Mol. Biol., 1996, 31(5), 957-973		
641	Juby, C. D. et al., "Facile Preparation of 3'oligonucleotide-Peptide Conjugates," Tetrahedron Letters (1991) 32(7):879-882.		
642	Jungblut, P.R., et al., "Proteomics in human disease: cancer, heart and infectious diseases," Electrophoresis, 1999, 20, 2100-2110		
643	Jurecic, R., et al., "Long-distance DD-PCR and cDNA microarrays," Curr. Opin. Microbiol., 2000, 3, 316-321		

<b>Examiner Signature</b>		<b>Date Considered</b>	
---------------------------	--	------------------------	--

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

36

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

- |     |   |
|-----|---|
| 644 | Kabanov, A.V., "A new class of antivirals: antisense oligonucleotides combined with a hydrophobic substituent effectively inhibit influenza virus reproduction and synthesis of virus-specific proteins in MDCK cells", FEBS Letts., 1990, 259, 327-330 |
| 645 | Kadonaga, J.T. and Tjian, R., "Affinity purification of sequence-specific DNA binding proteins", Proc. Natl. Acad. Sci. USA, 1986, 83, 5889-5893  |
| 646 | Kadonaga, J.T., "Purification of Sequence-Specific Binding Proteins b DNA Affinity Chromatography", Methods in Enzymology, 1991, 208, 10-23   |
| 647 | Kasher, et al., "Rapid Enrichment of HeLa Transcription Factors IIIB and IIIC by Using Affinity Chromatography Based on Avidin-Biotin Interactions", Mol. And Cell. Biol., 1986, 6, 3117-3127   |
| 648 | Kawaguchi, et al., "Purification of DNA-binding transcription factors by their selective adsorption of the affinity atex particles", Nucleic Acids Research, 1989, 17, 6229-6240  |
| 649 | Kawasaki, et al., "Synthesis and Biophysical Studies of 2'-dRIBO-2'-F Modified Oligonucleotides", Conf. on Nucleic Acid Therapeutics, Clearwater, FL, Jan. 13-16, 1991, 10 pages  |
| 650 | Kawasaki, et al., "Uniformly Modified 2'-Deoxy-2'-fluoro Phosphorothioate Oligonucleotides as Nuclease-Resistant Antisense Compounds with High Affinity and Specificity for RNA Targets", J. Med. Chem., 1993, 36, 831-841                              |
| 651 | Kawasaki, H/ et al., "Hes1 is a target of MicroRNA-23 during retinoic-acid-induced neuronal differentiation of NT2 cells," Nature (2003) 423: 838-842   |
| 652 | Kennedy, "Hydrophobic Chromatography", Methods in Enzymology, 1990, 182, 339-343  |
| 653 | Khurshid et al., "The unique conformational stability of poly 2'-O-Ethyladenylic Acid," FEBS Letters, 1972, 28(1), 25   |
| 654 | Khvorova, A. et al., "Functional siRNAs Exhibit Strand Bias," Cell, 2003, 115(2), 209-216   |
| 655 | Kiaris, H. et al., "Antagonists of Growth Hormone-Releasing Hormone Inhibit the Growth of U-87MG Human Glioblastoma in Nude mice," Neoplasia, 2000, 2(3), 242-250   |
| 656 | Kielanowska et al., "Preparation and properties of poly 2'-O-ethylcytidylic acid," Nucl. Acids Res., 1976, 3(3), 817-824  |
| 657 | Kingston, R.E. et al., "Calcium Phosphate Transfection", Current Protocols in Neuroscience, 1997, Supplement 1, A.1C.1 - A.1C.8   |

Examiner  
Signature

Date

Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet 37 of 57

**Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivimore
<b>Attorney Docket Number</b>	ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

658	Klopffer, A.E. et al., "Synthesis of 2'-Aminoalkyl-Substituted Fluorinated Nucleobases and Their Influence on the Kinetic Properties of Hammerhead Ribozymes," ChemBioChem (2004) 5: 707-716
659	Klopffer, A.E. et al., "The effect of universal fluorinated nucleobases on the catalytic activity of ribozymes," Nucleosides Nucleotides Nucleic Acids (2003) 22(5-8): 1347-1350
660	Knecht, D., "Application of Antisense RNA to the Study of the Cytoskeleton: Background, Principles, and a Summary of Results Obtained with Myosin Heavy Chain", Cell Motil. Cytoskel., 1989, 14, 92-102
661	Knochbin et al., "An antisense RNA involved in p53 mRNA maturation in murine erythroleukemia cells induced to differentiate", EMBO J., 1989, 8, 4107-4114
662	Knorre, et al., "Complementary-Addressed Sequence-Specific Modification of Nucleic Acids", Progress in Nucleic Acid Research and Molecular Biology 1985, 32, 291-321
663	Koole, et al., "Synthesis of phosphate-methylated DNA fragments using 9-fluorenylmethoxycarbonyl as transient base protecting group", J. Org. Chem., 1989, 54, 1657-1664
664	Koshkin, A.A., et al., "LNA (locked nucleic acid): an RNA mimic forming exceedingly stable LNA:LNA duplexes," J. Am. Chem. Soc., 1998, 120, 13252-13253
665	Koshkin, A.A., et al., "LNA (locked nucleic acids): synthesis of the adenine, cytosine, guanine, 5-methylcytosine, thymine and uracil bicyclonucleoside monomers, oligomerisation, and unprecedented nucleic acid recognition," Tetrahedron, 1998, 54, 3607-3630
666	Kraynack, B.A. et al., "Small interfering RNAs containing full 2'-O-methylribonucleotide-modified sense strands display Argonaute2/eIF2C2-dependent activity," RNA, 2006, 12, 163-176
667	Krieg, A. M. et al., "Uptake of Oligodeoxyribonucleotides by Lymphoid Cells Is Heterogeneous and Inducible," Antisense Research and Development (1991) 1:161-171.
668	Krinke, L. et al., "RNase III-dependent hydrolysis of $\gamma$ Cl-O gene mRNA mediated by $\gamma$ OOP antisense RNA", Genes & Devel., 1990, 4, 2223-2233
669	Kroschwitz, J.I. (Ed.), The Concise Encyclopedia of Polymer Science and Engineering, John Wiley & Sons, 1990, 858-859
670	Krug, A., et al., "Synthesis of oligonucleotide probes containing 2'-deoxy-2'-fluoronucleosides for cleavage of RNA by RNase H," Biomed. Biochem. Acta, 1990, 49, 161-166

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO			<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>			<b>Application Number</b>	10/701,236
			<b>Filing Date</b>	11-04-2003
			<b>First Named Inventor</b>	Brenda F. Baker
			<b>Art Unit</b>	1635
			<b>Examiner Name</b>	Tracy Ann Vivlemore
(use as many sheets as necessary)			<b>Attorney Docket Number</b>	ISIS-5207
Sheet	38	of	57	

NON PATENT LITERATURE DOCUMENTS				
671	Krug, A., et al., "The behaviour of 2'-deoxy-2'-fluorouridine incorporated into oligonucleotides by the phosphoramidite approach," Nucleosides & Nucleotides, 1989, 8(8), 1473-1483			
672	Krystal et al., "N-myc mRNA Forms an RNA-RNA Duplex with Endogenous Antisense Transcripts", Mol. And Cell. Biol., 1990, 10, 4180-4191			
673	Kuijpers, W. H. A. et al., "Specific Recognition of Antibody-Oligonucleotide Conjugates by Radiolabeled Antisense Nucleotides: A Novel Approach for Two-Step Radioimmunotherapy of Cancer," Bioconjugate Chem. (1993) 4(1):94-102.			
674	Kumar et al., "Antisense RNA: function and fate of duplex RNA in cells of higher eukaryotes," Microbiology and Molecular Biology Reviews (1998) 62(4): 1415-1434			
675	Kumar, R., et al., "The first analogues of LNA (locked nucleic acids): phosphorothioate-LNA and 2'-thio-LNA," Bioorg. Med. Chem. Lett., 1998, 8, 2219-2222			
676	Kurchavov, N.A., et al., "A new phosphoramidite reagent for the incorporation of diazaphenoxazinone nucleoside with enhanced base-pairing properties into oligodeoxynucleotides," Nucleosides and Nucleotides, 1997, 16, 1837-1846			
677	Kurreck, J., "Antisense technologies, Improvement through novel chemical modifications," Eur. J. Biochem., 2003, 270(8), 1628-1644			
678	Kusmierek et al., "Alkylation of cytidine-5'-phosphate: Mechanisms of alkylation, influence of O'-alkylation on susceptibility of pyrimidine nucleotides to some nucleolytic enzymes, and synthesis of 2'-O-alkyl polynucleotides," ACTA Biochim. Polonica, 1973, 20(4), 365-381			
679	Lacerra, G., et al., "Restoration of hemoglobin synthesis in erythroid cells from peripheral blood of thalassemic patients," Proc. Natl. Acad. Sci. USA, August 15, 2000, 97(17), 9591-9596			
680	Lai J. S. et al., "Fluorinated DNA Bases as Probes of Electrostatic Effects in DNA Base Stacking," Angew. Chem. Int. Ed. (2003) 42: 5973-5977			
681	Lai, J. S. et al., "Selective Pairing of Polyfluorinated DNA Bases," J. Am. Chem. Soc. (2004) 126(10): 3040-3041			
682	Lane, A. N. et al., "NMR Assignments and Solution Conformation of the DNA-RNA Hybrid Duplex d(GTGAACCTT)-r(AAGUUCAC)," Eur. J. Biochem., 1993, 215, 297-306			
683	Larson, E.J., et al., "Rapid DNA fingerprinting of pathogens by flow cytometry," Cytometry, 2000, 41, 203-208			

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

39

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivimore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

- |     |   |
|-----|---|
| 684 | Larsson, M., et al., "High-throughput protein expression of cDNA products as a tool in functional genomics," J. Biotechnol., 2000, 80, 143-157  |
| 685 | Le Doan et al., "Sequence-Targeted Chemical Modifications of Nucleic Acids by Complementary Oligonucleotides Covalently Linked to Porphyrins", Nucleic Acid Research, 1987, 15, 8643-8659                                       |
| 686 | Lee, K. et al., "Ring-Constrained (N)-Methanocarba Nucleosides as Adenosine Receptor Agonists: Independent 5'-Uronamide and 2'-Deoxy Modifications," Bioorganic & Medicinal Chemistry Letters, 2001, 11(10), 1333-1337          |
| 687 | Lee, Y. et al., "MicroRNA maturation: stepwise processing and subcellular localization," EMBO J. (2002) 21(17): 4663-4670   |
| 688 | Lee, Y. et al., "The nuclearRNase III Drosha initiates microRNA processing," Nature (2003) 425: 415-419   |
| 689 | Leeds, J.M. et al., "Pharmacokinetic Properties of Phosphorothioate Oligonucleotides," Nucleosides Nucleotides, 1997, 16(7-9), 1689-1693  |
| 690 | Lengyel, P., "Double-stranded RNA and interferon action," J. Interferon Res., 1987, 7, 511-519  |
| 691 | Letsinger et al., "Effects of Pendant Groups at Phosphorus on Binding Properties of D-ApA Analogues", Nucleic Acids Research, 1986, 14, 3487-3499   |
| 692 | Letsinger, R.L. et al., "Cholesteryl-conjugated oligonucleotides: Synthesis, properties and activity as inhibitors of replication of human immunodeficiency virus in cell culture", Proc. Natl. Acad. Sci., 1989, 86, 6553-6556 |
| 693 | Lewis, D.L. et al., "Efficient delivery of siRNA for inhibition of gene expression in postnatal mice," Nature Genetics, 2002, 32, 107-108   |
| 694 | Li, S. et al., "Folate-Mediated Targeting of Antisense Oligodeoxynucleotides to Ovarian Cancer Cells," Pharm. Res. (1998) 15(10):1540-1545.   |
| 695 | Liao, "A pyrimidine-guanine sequence-specific ribonuclease from Rana catesbeiana (bullfrog) oocytes", Nucl. Acids Res., 1992, 20, 1371-1377   |
| 696 | Lima, W. F. et al., "Highly efficient endonucleolytic cleavage of RNA by a Cys2His2 zinc-finger peptide," Proc. Natl. Acad. Sci. USA (1999) 96:10010-10015.   |
| 697 | Lima, w.f. ET AL., Biochemistry, Vol. 36, pages 390-398 (1997)  |

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			<b>Application Number</b>	10/701,236	
			<b>Filing Date</b>	11-04-2003	
			<b>First Named Inventor</b>	Brenda F. Baker	
			<b>Art Unit</b>	1635	
			<b>Examiner Name</b>	Tracy Ann Vivliemore	
<b>Sheet</b>	<b>40</b>	<b>of</b>	<b>57</b>	<b>Attorney Docket Number</b>	ISIS-5207

NON PATENT LITERATURE DOCUMENTS		
698	Limbach, P.A. et al., "Summary: the modified nucleosides of RNA," Nucleic Acids Res., 1994, 22(12), 2183-2196	
699	Lin, K.-Y. et al., "A Cytosine Analogue Capable of Clamp-Like Binding to a Guanine in Helical Nucleic Acids," J. Am. Chem. Soc., 1998, 120(33), 8531-8532	
700	Lin, K.-Y. et al., "Tricyclic 2'-Deoxycytidine Analogs: Synthesis and Incorporation into Oligodeoxynucleotides Which Have Enhanced Binding to Complementary RNA," J. Am. Chem. Soc., 1995, 117, 3873-3874	
701	Lin, M. et al., "Inhibition of collagenase type I expression by psoralen antisense oligonucleotides in dermal fibroblasts," Faseb J. 1995, 9, 1371-1377	
702	Liu, H. et al., "A Four Base Paired Genetic Helix with Expanded Size," Science (2003) 302; 868-871	
703	Liu, H. et al., "Toward a New Genetic System with Expanded Dimensions: Size-Expanded Analogues of Deoxyadenosine and Thymidine," J. Am Chem Soc. (2004) 126(4) 1102-1109	
704	Liu, K. et al., "Efficient Nuclear Delivery of Antisense Oligodeoxynucleotides and Selective Inhibition of CETP Expression by Apo E Peptide in a Human CETP-Stably Transfected CHO Cell Line," Arterioscler. Thromb. Vasc. Biol. (1999) 19:2207-2213.	
705	Lixin, R. et al., "Novel Properties of the Nucleolar Targeting Signal of Human Angiogenin," Biochem. Biophys. Res. Comm. (2001) 284:185-193.	
706	Loakes, D. et al., "The applications of universal DNA base analogues," Nucleic Acids Res., 2001, 29(12), 2437-2447	
707	Lohrmann et al., "New Solid Supports for DNA Synthesis", DNA, 1984, 3, 122	
708	Lukhtanov, E. A. et al., "Direct, Solid Phase Assembly of Dihydropyrroloindole Peptides with Conjugated Oligonucleotides," Bioconjugate Chem. (1996) 7(5):564-567.	
709	Lund et al., "Assessment of methods for covalent binding of nucleic acids to magnetic beads, Dynabeads™, and the characteristics of the bound nucleic acids in hybridization reactions", Nucl. Acids Res., 1988, 16, 10861-10880	
710	Madden, S.L., et al., "Serial analysis of gene expression: from gene discovery to target identification," Drug Discov. Today, September 2000, 5(9), 415-425	

<b>Examiner Signature</b>		<b>Date Considered</b>	
-------------------------------	--	----------------------------	--



Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

41

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

711	Mahato et al., "Modulation of gene expression by antisense and antigene oligodeoxynucleotides and small interfering RNA," Expert Opinion on Drug Delivery, Jan. 2005, 2(1), 3-28	
712	Maniak, M. et al., "Evidence for a feedback regulated back-up promoter which controls permanent expression of a Dictyostelium gene", Nucl. Acids Res., 1990, 18, 5375-5380	
713	Manoharan M. et al., "Cholic Acid-Oligonucleotide Conjugates for Antisense Applications", Bioorganic Med. Chem. Letts., 1994, 4, 1053-1060	
714	Manoharan M. et al., "Oligonucleotide Conjugates: Alteration of the Pharmacokinetic Properties of Antisense Agents", Nucleosides and Nucleotides, 1995, 14, 969-973	
715	Manoharan, M. et al., "Chemical Modifications to Improve Uptake and Bioavailability of Antisense Oligonucleotides", Annals NY Acad. Sciences, 1992, 660, 306-309	
716	Manoharan, M. et al., "Introduction of a Lipophilic Thioether Tether in the Minor Groove of Nucleic Acids for Antisense Applications", Bioorg. Med. Chem. Letts., 1993, 3, 2765-2770	
717	Manoharan, M. et al., "Novel Functionalization of the Sugar Moiety of Nucleic Acids for Multiple Labeling in the Minor Groove," Tetrahedron Letters (1991) 32(49):7171-7174.	
718	Manoharan, M. et al., "Lipidic Nucleic Acids", Tetrahedron Letts., 1995, 36, 3651-3654	
719	Manoharan, M., "2'-Carbohydrate modifications in antisense oligonucleotide therapy: importance of conformation, configuration and conjugation," Biochimica et Biophysica Acta, 1999, 1489, 117-130	
720	Manoharan, M., "Designer Antisense Oligonucleotides: Conjugation Chemistry and Functionality Placement," Antisense Research and Applications, Crooke and Lebleu, eds., CRC Press Boca Raton, FL, 1993, Chapter 17, 303-349.	
721	Manoharan, M., "Oligonucleotide Conjugates as Potential Antisense Drugs with Improved Uptake, Biodistribution, Targeted Delivery and Mechanism of Action," Antisense & Nucleic Acid Drug Development (2002) 12:103-128.	
722	Manoharan, M., "Oligonucleotide Conjugates in Antisense Technology," Antisense Drug Technology, Principles, Strategies, and Applications, Crooke, S. T. ed., Marcel Dekker, New York, (2001) Chapter 16, 391-467.	
723	Manoharan, M., "RNA interference and chemically modified small interfering RNAs," Current Opinion in Chemical Biology, 2004, 8, 570-579	

**Examiner  
Signature****Date  
Considered**

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			<b>Application Number</b>	10/701,236	
			<b>Filing Date</b>	11-04-2003	
			<b>First Named Inventor</b>	Brenda F. Baker	
			<b>Art Unit</b>	1635	
			<b>Examiner Name</b>	Tracy Ann Vivliemore	
<b>Sheet</b>	42	of	57	<b>Attorney Docket Number</b>	ISIS-5207

NON PATENT LITERATURE DOCUMENTS		
724	Marcus-Sekura, "Comparative inhibition of chloramphenicol acetyltransferase gene expression by antisense oligonucleotide analogues having alkyl phosphotriester, methylphosphonate and phosphorothioate linkages", Nucleic Acids Res., 1987, 15, 5749-5763	
725	Marcus-Sekura, "Techniques for Using Antisense Oligodeoxyribonucleotides to Study Gene Expression", Anal. Biochemistry, 1988, 172, 289-295	
726	Markiewicz, et al., "Simultaneous Protection of 3'- and 5'-Hydroxyl Groups of Nucleosides", Nucleic Acid Chemistry, Part 3, pgs. 229-231, L.B. Townsend, et al., Eds., J. Wiley and Sons, New York, 1986, 229-231	
727	Martin, "Ein neuer Zugang zu 2'-O-Alkylribonucleosiden und Eigenschaften deren Oligonucleotide", Helv. Chim. Acta., 1995, 78, 486-504	
728	Maruenda, H. et al., "Antisense Sequence-Directed Cross-Linking of DNA Oligonucleotides by Mitomycin C," Bioconjugate Chem. (1996) 7(5):541-544.	
729	Maruenda, H. et al., "Antisense sequence-directed cross-linking of RNA oligonucleotides by mitomycin," Anti-Cancer Drug. Des. (1997) 12, 473-479	
730	Marwick, C., "First "Antisense" Drug Will Treat CMV Retinitis," J. Am. Med. Assoc., 1998, 280(10), 871	
731	Maskos, U. And Southern, E.M., "Oligonucleotide hybridisations on glass supports: a novel linker for oligonucleotide synthesis and hybridisation properties of oligonucleotides synthesised in situ", Nucl. Acids. Res., 1992, 20, 1679-1684	
732	Matson, et al., "Biopolymer Synthesis on Polypropylene Supports", Anal. Biochem., 1994, 217, 306-310	
733	Matsukura, M. et al., "Phosphorothioate Analogs of Oligodeoxynucleotides: Inhibitors of Replication and Cytopathic Effects of Human Immunodeficiency Virus", Proc. Natl. Acad. Sci. USA, 1987, 84, 7706-7710	
734	Matteucci, M.D. et al., "Synthesis of Deoxyoligonucleotides on a Polymer Support," J. Am. Chem. Soc., 1981, 103(11), 3185-3191	
735	McBride, L.J. and Caruthers, M.H., "An Investigation of Several Deoxynucleoside Phosphoramidites Useful for Synthesizing Deoxyoligonucleotides", Tetrahedron Letters, 1983, 24, 245-248	
736	McCaffery, A.P. et al., "RNA interference in adult mice," Nature, 2002, 418, 38-39	

<b>Examiner Signature</b>	<b>Date Considered</b>
-------------------------------	----------------------------

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

43

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivimore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

- |     |  |
|-----|--|
| 737 | McIntyre et al., Antisense Res. Dev., 1993, 3, 309-322   |
| 738 | McQueen, C.A. et al., "Effect of Nalidixic Acid on DNA Repair in Rat Hepatocytes," Cell Biol. Toxicol., 1989, 5(2), 201-206  |
| 739 | Meegan, J.M. et al., "Double-Stranded Ribonuclease Coinduced with Interferon", Science, 1989, 244, 1089-1091   |
| 740 | Mellitzer et al., "Spatial and temporal 'knock down' of gene expression by electroporation of double-stranded RNA and morpholinos into early postimplantation mouse embryos," Mechanisms of Development, 2002, 118(1-2), 57-63 |
| 741 | Metelev, et al., Bioorg. & Med. Chem. Lett., 1994, 4(24), 2929-2934  |
| 742 | Meunier, L. et al., "The nuclear export signal-dependent localization of oligonucleotides enhances the inhibition of the protein expression from a gene transcribed in cytosol," Nucleic Acids Res. 1999, 27(13):2730-2736     |
| 743 | Meyer, et al., "Efficient, Specific Cross-Linking and Cleavage of DNA by Stable, Synthetic Complementary Oligodeoxynucleotides", J. Am. Chem. Soc. 1989, 111, 8517-8519  |
| 744 | Mili, S. et al., "Distinct RNP Complexes of Shuttling hnRNP Proteins with Pre-mRNA and mRNA. Candidate Intermediates in Formation and Export of mRNA," Mol. Cell Biol. (2001) 21(21):7307-7319.                                |
| 745 | Miller, et al., "A New Approach to Chemotherapy Based on Molecular Biology and Nucleic Acid Chemistry: Matagen (Masking Tape for Gene Expression", Anti-Cancer Drug Design, 1987, 2, 117-128                                   |
| 746 | Miller, et al., "Biochemical and Biological Effects of Nonionic Nucleic Acid Methylphosphonates", Biochemistry 1981, 20, 1874-1880   |
| 747 | Miller, et al., "Nonionic nucleic acid analogues. Synthesis and characterization of dideoxyribonucleoside methylphosphonates", Biochemistry 1979, 18, 5134-5143  |
| 748 | Miller, et al., "Synthesis and properties of adenine and thymine nucleoside alkyl phosphotriesters, the neutral analogs of dinucleoside monophosphates", J. Am. Chem. Soc. 1971, 93, 6657-6664                                 |
| 749 | Milligan, "Current concepts in antisense drug design," J. Med. Chem., 1993, 36, 1923-1937  |
| 750 | Mishra et al., "Improved leishmanicidal effect of phosphorothioate antisense oligonucleotides by LDL-mediated delivery", Biochim. Biophys. Acta, 1995, 1264, 229-237   |

**Examiner  
Signature****Date****Considered**

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 44 of 57

**Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivlemore
<b>Attorney Docket Number</b>	ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

751	Miura et al., "Fluorometric determination of total mRNA with oligo(dT) immobilized on microtiter plates", Clin. Chem., 1996, 42(11), 1758-1764
752	Monia, et al., "Antitumor activity of a phosphorothioate antisense oligodeoxynucleotide targeted against c-ras kinase", Nature Medicine, 1996, 2, 668-675
753	Monia, et al., "Evaluation of 2'-Modified Oligonucleotides Containing 2'-Deoxy Gaps as Antisense Inhibitors of Gene Expression", J. Biol. Chem., 1993, 268, 14514-14522
754	Monia, et al., "Selective Inhibition of Mutant Ha-ras mRNA Expression by Antisense Oligonucleotides", J. Biol. Chem., 1992, 267, 19954-19962
755	Montgomery, M.K. et al., "RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans," Proc. Natl. Acad. Sci. USA, 1998, 95(26), 15502-15507
756	Moran, S. et al., "A thymidine triphosphate shape analog lacking Watson-Crick pairing ability is replicated with high sequence selectivity," Proc. Natl. Acad. Sci. USA (1997) 94, 10506-10511
757	Moran, S. et al., "Difluorotoluene, a Nonpolar Isostere for Thymine, Codes Specifically and Efficiently for Adenine in DNA Replication," J Am Chem Soc. (1997) 119(8), 2056-2057
758	Morita, K. et al., "2'-O,4'-C-Ethylene-Bridged Nucleic Acids (ENA): Highly Nuclease-Resistant and Thermodynamically Stable Oligonucleotides for Antisense Drug," Bioorganic & Medicinal Chemistry Letters, 2002, 12(1), 73-76
759	Morita, K. et al., "Synthesis and Properties of 2'-O,4'-C-Ethylene-Bridged Nucleic Acids (ENA) as Effective Antisense Oligonucleotides," Bioorg. Med. Chem., 2003, 11, 2211-2226
760	Moulds, C. et al., "Site and Mechanism of Antisense Inhibition by C-5 Propyne Oligonucleotides," Biochemistry, 1995, 34(15), 5044-5053
761	Napoli, C. et al., "Introduction of a Chimeric Chalcone Synthase Gene into Petunia Results in Reversible Co-Suppression of Homologous Genes in trans," Plant Cell, 1990, 2(4), 279-289
762	Narhi, et al., "Hydrophobic Interaction Chromatography in Alkaline pH", Anal. Biochem., 1989, 182, 266-270
763	Nasevicius, A. et al., "Effective targeted gene 'knockdown' in zebrafish," Nature Genetics, 2000, 26, 216-220
764	Nellen, W., C., "What makes an mRNA anti-sense-itive?", Curr. Opin. Cell. Biol., 1993, 18, 419-424

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			<b>Application Number</b>	10/701,236	
			<b>Filing Date</b>	11-04-2003	
			<b>First Named Inventor</b>	Brenda F. Baker	
			<b>Art Unit</b>	1635	
			<b>Examiner Name</b>	Tracy Ann Vivlemore	
<b>Sheet</b>	<b>45</b>	<b>of</b>	<b>57</b>	<b>Attorney Docket Number</b>	ISIS-5207

NON PATENT LITERATURE DOCUMENTS		
765	Nellen, W., et al., "Mechanisms of gene regulation by endogenous and artificially introduced antisense RNA", Biochem., Soc. Trans., 1992, 20, 750-754	
766	Nelson, P. S. et al., "Bifunctional oligonucleotide probes synthesized using a novel CPG support are able to detect single base pair mutations," Nucleic Acids Res. (1989) 17(18):7187-7194	
767	Nestle, F.O. et al., "Cationic Lipid is not Required for Uptake and Selective Inhibitory Activity of ICAM-1 Phosphorothioate Antisense Oligonucleotides in Keratinocytes," J. Invest. Dermatol., 1994, 103, 569-575	
768	Nielsen et al., "Sequence-Selective Recognition of DNA by Strand Displacement with a Thymine-Substituted Polyamide", Science, 1991, 254, 1497-1500	
769	Nishikura, K. et al., "A Short Primer on RNAi: RNA-Directed RNA Polymerase Acts as a Key Catalyst," Cell, 2001, 107(4), 415-418	
770	Nitta, et al., "Purification and Some Properties of Ribonuclease from Xenopus laevis Eggs", Biol. Pharm. Bull. (Jpn.), 1993, 16, 353-356	
771	Noguchi, et al., "Characterization of an Antisense Inr Element in the eIF-2 $\alpha$ Gene", J. Biol. Chem., 1994, 269, 29161-29167	
772	Noyes, et al., "Nucleic Acid Hybridization Using DNA Covalently Coupled to Cellulose", Cell, 1975, 5, 301-310	
773	Nykänen, A. et al, "ATP Requirements and Small Interfering RNA Structure in the RNA Interference Pathway," Cell, 2001, 107, 309-321	
774	Oberhauser et al., "Effective incorporation of 2'-O-methyl-oligonucleotides into liposomes and enhanced cell association through modification with thiocholesterol", Nucl. Acids Res., 1992, 20(3), 533-538	
775	Ogilvie, K.K. et al., "The Use of Silyl Groups in Protecting the Hydroxyl Functions of Ribonucleosides," Tetrahedron Letters, 1974, 15(33), 2861-2863	
776	Ohtsuka et al., "Recognition By Restriction Endonuclease EcoRI of Deoxyoctanucleotides containing modified sugar moieties," Eur. J. Biochem., Mar. 1984, 447-450	
777	Ohtsuki, et al., "Isolation and purification of double-stranded ribonuclease from calf thymus", J. Biol. Chem., 1977, 252, 483-491	

<b>Examiner Signature</b>	<b>Date Considered</b>
-------------------------------	----------------------------

Substitute for 1449/PTO			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>			<b>Application Number</b>	10/701,236	
			<b>Filing Date</b>	11-04-2003	
			<b>First Named Inventor</b>	Brenda F. Baker	
			<b>Art Unit</b>	1635	
			<b>Examiner Name</b>	Tracy Ann Vivimore	
			<b>Attorney Docket Number</b>	ISIS-5207	
Sheet	46	of	57		

*(use as many sheets as necessary)*

NON PATENT LITERATURE DOCUMENTS				
778	Olie, R.A. et al., "Analysis of ribosyl-modified, mixed backbone analogs of a bcl-2/bcl-xL antisense oligonucleotide," Biochimica et Biophysica Acta, 1576 (2002), 101-109			
779	Olsen, D.B., et al., "Study of a Hammerhead Ribozyme Containing 2'-Modified Adenosine Residues," Biochemistry, 1991, 30., 9735-9741			
780	O'Neill, B.M. et al., "A Highly Effective Nonpolar Isostere of Deoxyguanosine: Synthesis, Structure, Stacking, and Base Pairing," J. Org. Chem. (2002) 67(17):5869-5875			
781	Opalinska et al., "Nucleic-acid therapeutics: basic principles and recent applications," Nature Review, 2002, 1, 503-514			
782	Ørum, H. et al., "Locked nucleic acids: A promising molecular family for gene-function analysis and antisense drug development," Curr. Opin. Mol. Therap., 2001, 3(3), 239-243			
783	Outten, et al., "Synthetic 1-methoxybenzo[d]naphtho[1,2-b]pyran-6-one c-glycosides", J. Org. Chem. 1987, 52, 5064-5066			
784	Owen, et al., "Transcriptional activation of a conserved sequence element by ras requires a nuclear factor distinct from c-fos or c-jun", Proc. Natl. Acad. Sci USA, 1990, 87, 3866-3870			
785	Owen, G.R. et al., "4'-Substituted Nucleosides. 3. Synthesis of Some 4'-Fluorouridine Derivatives," J. Org. Chem., 1976, 41(18), 3010-3017			
786	Parker, J.S. et al., "Structure insights into mRNA recognition from a PIWI domain-siRNA guide complex," Nature, 2005, 434, 663-666			
787	Parkes, et al., "A short synthesis of 3'-cyano-3'-Deoxythymidine", Tetra. Lett., 1988, 29, 2995-2996			
788	Parr, W. et al., "Solid-Phase Peptide Synthesis on an Inorganic Matrix having Organic Groups on the Surface," Angew Chem. Internat. Edit, 1972, 11 (4), 314-315			
789	Patzel et al., "A Theoretical Approach to Select Effective Antisense Oligodeoxyribonucleotides at High Statistical Probability," Nucleic Acids Research (1999) pp. 4328-4334.			
790	Pease, et al., "Light-generated oligonucleotide arrays for rapid DNA sequence analysis", Proc. Natl. Acad. Sci. USA, 1994, 91, 5022-5026			
791	Peracchi, A., Rev. Med. Virol., Vol. 14, pages 47-64 (2004).			
792	Petersen, M. et al., "The conformations of locked nucleic acids (LNA)," J. Mol. Recognit., 2000, 13, 44-53			

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			<b>Application Number</b>	10/701,236	
			<b>Filing Date</b>	11-04-2003	
			<b>First Named Inventor</b>	Brenda F. Baker	
			<b>Art Unit</b>	1635	
			<b>Examiner Name</b>	Tracy Ann Vivienne	
<b>Sheet</b>	<b>47</b>	<b>of</b>	<b>57</b>	<b>Attorney Docket Number</b>	ISIS-5207

NON PATENT LITERATURE DOCUMENTS		
793	Petersheim, et al., "Base-Stacking and Base-Pairing contributions to helix stability: thermodynamics of double-helix formation with CCGG, CCGGp, CCGGAp, ACCGGp, CCGGUp, and ACCGGUp", Biochemistry, 1983, 22, 256-263	
794	Pichon, C. et al., "Intracellular Routing and Inhibitory Activity of Oligonucleopeptides Containing a KDEL Motif," Mol. Pharmacol. (1997) 51:431-438.	
795	Pieken, W.A. et al., "Kinetic Characterization of Ribonuclease-Resistant 2'-Modified Hammerhead Ribozymes," Science, 1991, 253, 314-317	
796	Pieken, W.A., et al., "Structure-Function Relationship of Hammerhead Ribozymes as Probed by 2'-Modifications," Nucleic Acids Symp Ser., 1991, 24, 51-53	
797	Pike et al., "Mixed Alkylation (Methylation and Ethylation) of Adenosine by Diazoethane in Aqueous 1,2-Dimethoxyethane," J. Org. Chem., 1974, 39(25), 3674-3676	
798	Pilet, J. et al., "Structural parameters of single and double helical polyribonucleotides," Biochem Biophys Res Commun, 1973, 52(2), 517-523	
799	Pitts, A.E. et al., "Inhibition of human telomerase by 2'-O-methyl-RNA," Proc. Natl. Acad. Sci. USA, 1998, 95, 11549-11554	
800	Pon, et al., "Derivatization of Controlled Pore Glass Beads for Solid Phase Oligonucleotide Synthesis", BioTech., 1988, 6, 768-773	
801	Poopeiko et al. Biorganic & Medicinal Chemistry Letters 2003, vol. 13, pages 2285-2290	
802	Prakash, T. P. et al., Abstract of The 227th ACS National Meeting, Anaheim, CA, March 28-April 1, 2004	
803	Prakash, T. P. et al., "Synthesis of Site-Specific Oligonucleotide-Polyamine Conjugates," Bioorg. Med. Chem. Lett. (1994) 4(14):1733-1738.	
804	Prashar, Y., et al., "A method for display of 3'-end fragments of restriction enzyme-digested cDNAs for analysis of differential gene expression," Methods Enzymol., 1999, 303, 258-272	
805	Prokipcak, et al., "Purification and Properties of a Protein that Binds to the C-terminal Coding Region of Human c-myc mRNA", J. Biol. Chem., 1994, 269, 9261-9269	
806	Puglisi, et al., "Absorbance melting curves of RNA", Methods in Enzymology, 1989, 180, 304-325	

<b>Examiner Signature</b>	<b>Date Considered</b>
---------------------------	------------------------

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

48

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

807	Rajur, S. B. et al., "Covalent Protein-Oligonucleotide Conjugates for Efficient Delivery of Antisense Molecules," Bioconjugate Chem. (1997) 8(6):935-940.	
808	Ranganathan, "Modification of the 21-Position of Purine Nucleosides: Synthesis of 21-a-Substituted-21-Deoxyadenosine Analogs", Tetrahedron Letters, 1977, 15, 1291-1294	
809	Ransford et al., "2'-O-Ethyl Pyrimidine Nucleosides," J. Carbohydrates - Nucleosides - Nucleotides, 1974, 1(3), 275-278	
810	Rao, et al., "A Novel One-step Procedure for the Conversion of Thymidine into 2,3'-Anhydrothymidine", J. Chem. Soc. Chem. Commun., 1989, 997-998	
811	Rausch, J.W. et al., "Hydrolysis of RNA/DNA hybrids containing nonpolar pyrimidine isosteres defines regions essential for HIV type 1 polypurine tract selection," PNAS (2003) 100(20): 11279-11284	
812	Reddy, M.P. et al., "Fast Cleavage and Deprotection of Oligonucleotides," Tetrahedron Letters, 1994, 35(25), 4311-4314	
813	Reese, C.B. et al., "An Acetal Group Suitable for the Protection of 2'hydroxy Functions in Rapid Oligoribonucleotide Synthesis," Tetrahedron Letters, 1986, 27(20), 2291-2294	
814	Reese, C.B., et al., "4-(1,2,4-Triazol-1-yl)-and 4-(3-Nitro-1,2,4-triazol-1-yl)-1-(β-D-Arabinofuranosyl)cytosine(Ara-C)", J. Chem. Soc. Perkin Trans. I, 1982, pgs. 1171-1176	
815	Renneberg, D. et al. "Antisense properties of tricyclo-DNA," Nucleic Acids Res., 2002, 30(13), 2751-2757	
816	Renneberg, D., et al., "Watson—Crick base-pairing properties of tricycle-DNA," J. Am. Chem. Soc., 2002, 124, 5993-6002	
817	Revankar et al., "Synthesis and Antiviral/Antitumor of Certain 3-Seazaguanine Nucleosides and Nucleotides", J. Med. Chem. 1984, 24, 1389-1396	
818	Rhodes, J. et al., "Therapeutic potentiation of the immune system by costimulatory Schiff-baseforming drugs," Nature (1995) 377(6544):71-75.	
819	Robins, et al., "Nucleic acid related compounds. 41. Restricted furanose conformations of 3',5'-O((1,1,3,3-tetraisopropylidisiloxy-1,3-diyl)nucleosides provide a convenient evaluation of anomeric configuration1,2", Can. J. Chem., 1983, 61, 1911-1920	

Examiner  
SignatureDate  
Considered



Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			<b>Application Number</b>	10/701,236	
			<b>Filing Date</b>	11-04-2003	
			<b>First Named Inventor</b>	Brenda F. Baker	
			<b>Art Unit</b>	1635	
			<b>Examiner Name</b>	Tracy Ann Vivimore	
<b>Sheet</b>	<b>49</b>	<b>of</b>	<b>57</b>	<b>Attorney Docket Number</b>	ISIS-5207

NON PATENT LITERATURE DOCUMENTS		
820	Robins, et al., "Nucleic Acid Related Compounds. 42. A General Procedure for the Efficient Deoxygenation of Secondary Alcohols. Regiospecific and Stereoselective Conversion of Ribonucleosides to 2'-Deoxynucleosides", J. Am. Chem. Soc., 1983, 105, 4059-4065	
821	Robins, et al., "Synthesis of 2'-Deoxytubercidin, 2'-Deoxyadenosine, and Related 2'-Deoxynucleosides via a Novel Direct Stereospecific Sodium Salt Glycosylation Procedure", J. Am. Chem. Soc., 1984, 106, 6379-6382	
822	Roelen et al., "Synthesis of Nucleic Acid Methylphos-Phonothioates", Nucleic Acids Research 1988, 16(15), 7633-7645	
823	Rottman et al., "Influence of 2'-O-Alkylation on the Structure of Single-Stranded Polynucleotides and the Stability of 2'-O-Alkylated Polynucleotide Complexes," Biochem., 1974, 13, 2762-2771	
824	Rottman, F. et al., "Polymers Containing 2'-O-Methylnucleotides. II. Synthesis of Heteropolymers," Biochem, 1969, 8(11), 4354-4361	
825	Rottman, F. et al., "Polynucleotides Containing 2'- O-Methyladenosine. I. Synthesis by Polynucleotide Phosphorylase," Biochem, 1968, 7, 2634-2641	
826	Ruby, et al., "An Early Hierarchic Role of U1 Small Nuclear Ribonucleoprotein in Spliceosome Assembly", Science, 1988, 242, 1028-1035	
827	Rump, E. T. et al., "Preparation of Conjugates of Oligodeoxynucleotides and Lipid Structures and Their interaction with Low-Density Lipoprotein," Bioconjugate Chem. (1998) 9(3):341-349.	
828	Ryan, et al., "Synthesis of 2-Thio-D-ribose and 2'-Thioadenosine Derivatives", J. Org. Chem., 1971, 36(18), 2646-2657	
829	Saison-Behmoaras, T., et al., "Short modified antisense oligonucleotides directed against Ha-ras point mutation induce selective cleavage of the mRNA and inhibit T24 cells proliferation", EMBO, 1991, 10, 1111-1118	
830	Saito, H. And Richardson, C., "Processing of mRNA by Ribonuclease III Regulates Expression of Gene 1.2 of Bacteriophage T7", 1981, Cell, 27, 533-542	
831	Sambrook, et al., "Molecular Cloning. A Laboratory Manual", Cold Spring Harbor Laboratory Press, 1989, Vol. 2, pgs. 11.31-11.32	
832	San et al., "Safety and short term toxicity of a novel cationic lipid formulation for human gene therapy", Human Gene Therapy, 1993, 4, 781-788	

<b>Examiner Signature</b>	<b>Date Considered</b>
-------------------------------	----------------------------

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			<b>Application Number</b>	10/701,236	
			<b>Filing Date</b>	11-04-2003	
			<b>First Named Inventor</b>	Brenda F. Baker	
			<b>Art Unit</b>	1635	
			<b>Examiner Name</b>	Tracy Ann Vivienne	
<b>Sheet</b>	50	of	57	<b>Attorney Docket Number</b>	ISIS-5207

NON PATENT LITERATURE DOCUMENTS			
833	Sands, et al., "Biodistribution and Metabolism of Internally 3H-Labeled Oligonucleotides. II. 3',5'-Blocked Oligonucleotides", Mol. Pharmacol., 1995, 47, 636-646		
834	Sanghvi, Y.S. et al., "Heterocyclic Base Modifications in Nucleic acids and their Applications in Antisense Oligonucleotides", Antisense Research and Applications, CRC Press, Boca Raton, Chapter 15, 1993, 273-288		
835	Scaringe, S.A. et al., "Novel RNA Synthesis Method Using 5'-O-Silyl-2'-O-orthoester Protecting Groups," J. Am. Chem. Soc., 1998, 120(45), 11820-11821		
836	Scaringe, S.A., "RNA Oligonucleotide Synthesis via 5'-Silyl-2'-Orthoester Chemistry," Methods, 2001, 23, 206-217		
837	Scaringe, S.A., Thesis entitled, "Design and Development of New Protecting Groups for RNA Synthesis," University of Colorado (1996)		
838	Scherer et al., "Approaches for the sequence-specific knockdown of mRNA," Nat. Biotechnol., 2003, 21(12), 1457-1465		
839	Schott, "Template-Chromatographie An Stationar Gebundenen Oligonukleotiden", J. Chromatogr., 1975, 115, 461-476		
840	Schwartz, et al., "A microtransfection method using the luciferase-encoding reporter gene for the assay of human immunodeficiency virus LTR promoter activity", Gene, 1990, 88, 197-205		
841	Schwartz, M.E. et al., "Rapid Synthesis of Oligoribonucleotides Using 2'-O-(o-Nitrobenzyloxymethyl)-Protected Monomers," Bioorg. Med. Chem. Lett., 1992, 2(9), 1019-1024		
842	Schwarz, D.S. et al., "Asymmetry in the Assembly of the RNAi Enzyme Complex," Cell, 2003, 115(2), 199-208		
843	Schwarz, D.S., et al., "Evidence that siRNAs function as guides, not primers, in the Drosophila and human RNAi pathways," Molecular Cell, September 2002, 10(3), 537-548		
844	Searle, M. S. et al., "On the Stability of Nucleic Acid Structures in Solution: Enthalpy-Entropy Compensations, Internal Rotations and Reversibility," Nucl. Acids Res., 1993, 21(9), 2051-2056		
845	Seela, et al., "Palindromic Octa- and Dodecanucleotides Containing 2'-Deoxytubercidin: Synthesis, Hairpin Formation, and Recognition by the Endonuclease", Biochemistry, 1987, 26, 2232-2238		

<b>Examiner Signature</b>	<b>Date Considered</b>
---------------------------	------------------------

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

51

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

846	Seliger, H., et al., "Synthetic Oligonucleotides for Biomedical Applications," Nucleic Acids Symp Ser., 1991, 24:193-196	
847	Seliger, H., "Handelsübliche Polymere als Träger in der Oligonucleotidsynthese, 1", Die Makromolekulare Chemie, 1975, 176, 1611-1627	
848	Seliger, H., and Aumann, G., "Träger-Oligonucleotidsynthese an unvernetzten Copolymeren aus Vinylalkohol und N-Vinylpyrrolidon", Die Makromolekulare Chemie, 1975, 176, 609-627	
849	Seliger, H. and Aumann, G., "Oligonucleotide Synthesis on a Polymer Support Soluble in Water and Pyridine", Tetrahedron Letters, 1973, No. 31, 2911-2914	
850	Shea et al., "Synthesis, hybridization properties and antiviral activity of lipid-oligodeoxynucleotide conjugates", Nucl. Acids Res., 1990, 18(13), 3777-3783	
851	Sheehan, D. et al., "Biochemical properties of phosphonoacetate and thiophosphonoacetate oligodeoxyribonucleotides," Nucleic Acids Res., 2003, 31(14), 4109-4118	
852	Shi, Y., "Mammalian RNAi for the masses," Trends in Genetics (2003) 19(1): 9-12	
853	Shibahara, S. et al., "Inhibition of human immunodeficiency virus (HIV-1) replication by synthetic oligo-RNA derivatives," Nucl. Acids Res., 1989, 17(1), 239-252	
854	Siddell, S.G., "RNA Hybridization to DNA Coupled with Cyanogen-Bromide-Activated Sephadex", Eur. J. Biochem., 1978, 92, 621-629	
855	Sigman, "Nuclease Activity of 1,10-Phenanthroline-Copper Ion", Acc. Chem. Res., 1986, 19, 180-186	
856	Sijen, T. et al., "On the role of RNA amplification in dsRNA-triggered gene silencing," Cell, Nov. 16, 2001, 107, 465-476	
857	Singer et al., "Alkylation of Ribose in RNA Reacted with Ethylnitrosourea at Neutrality," Biochem., 1976, 15(23), 5052	
858	Singh, S.K. et al., "LNA (locked nucleic acids): synthesis and high-affinity nucleic acid recognition," Chem. Commun., 1998, 4, 455-456	
859	Singh, S.K., et al., "Synthesis of 2'-amino-LNA: a novel conformationally restricted high-affinity oligonucleotide analogue with a handle," J. Org. Chem., 1998, 63, 10035-10039	
860	Skorski, T. et al., "Antileukemia effect of c-myc N3'P5' phosphoramidate antisense oligonucleotides in vivo," Proc. Natl. Acad. Sci. USA, 1997, 94, 3966-3971	

Examiner  
Signature

Date

Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet 52 of 57

**Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivlemore
<b>Attorney Docket Number</b>	ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

861	Smith et al., "Antiviral effect of an oligo(nucleoside methylphosphonate) complementary to the splice junction of herpes simplex virus type 1 immediate early pre-mRNAs 4 and 5", Proc. Natl. Acad. Sci. USA, 1986, 83, 2787-2791
862	Smith, et al., "The synthesis of oligonucleotides containing an aliphatic amino group at the 5' terminus: synthesis of fluorescent DNA primers for use in DNA sequence analysis", Nucl. Acids Res., 1985, 13, 2399-2412
863	Smith, T.F. et al., "Comparison of Biosequences," Adv. Appl. Math., 1981, 2, 482-489
864	Song, E. et al., "RNA interference targeting Fas protects mice from fulminant hepatitis," Nature Med., 2003, 9(3), 347-351
865	Song, J.-J. et al., "The Crystal Structure of Argonaute and Its Implication for RISC Slicer Activity," Science, 2004, 305, 1434-1437
866	Song, J.-J. et al., "The crystal structure of the Argonaute2 PAZ domain reveals an RNA binding motif in RNAi effector complexes," Nature Struct. Biol., 2003, 10(12), 1026-1032
867	Soutschek, J. et al., "Therapeutic silencing of a endogenous gene by systemic administration of modified siRNAs," Nature, 2004, 432(7014), 173-178
868	Sproat, et al., "Highly Efficient Chemical Synthesis of 2'-O-methylidigoribonucleotides and Tetrabiotinylated Derivatives; Novel Probes That are Resistant to Degradation by RNA or DNA Specific Nucleases", Nucleic Acids Research, 1989, 17, 3373-3386
869	Sproat, et al., "New synthetic routes to protected purine 2'-O-methylriboside-3'-O-phosphoramidites using a novel alkylation procedure", Nucleic Acids Research, 1990, 18, 41-49
870	Steffens, R., et al., "168. Nucleic-acid analogs with constraint conformational flexibility in the sugar-phosphate backbone "tricycle-DNA", Helv. Chim. Acta, 1997, 80, 2426-2439
871	Stein, C.A. et al., 'Antisense Oligonucleotides as Therapeutic Agents - Is the Bullet Really Magical?', Science, 1993, 261, 1004-1012
872	Stein, et al., "Oligodeoxynucleotides as Inhibitors of Gene Expression: A Review", Cancer Research, 1988, 48, 2659-2668
873	Stein, et al., "Physicochemical properties of phosphorothioate oligodeoxynucleotides", Nucleic Acids Research, 1988, 16, 3209-3221

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

53

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

- |     |  |
|-----|--|
| 874 | Stolt, P. And Zillig, W., "Antisense RNA mediates transcriptional processing in an archaeobacterium, indicating a novel kind of RNase activity", Mol. Microbiol., 1993, 7, 875-882                               |
| 875 | Strickland, et al., "Antisense RNA Directed Against the 3' Noncoding Region Prevents Dormant mRNA Activation in Mouse Oocytes", Science, 1988, 241, 680-684  |
| 876 | Struck, "Vaccine R&D Success Rates and Development Times," Nature Biotechnology, May 1996, 14, 591-593   |
| 877 | Stufkens, et al., "Dynamic Jahn-Teller Effect in the Excited States of SeCl62-, SeBr62-, TeCl62- and TeBr62-," Recueil des Travaux Chimiques des Pays-Bas 1970, 89, 1185-1201                                    |
| 878 | Stull, et al., "Antigene, Ribozyme and Aptamer Nucleic Acid Drugs: Progress and Prospects", Pharm. Res., 1995, Pharm. Rev., 12, 465-482  |
| 879 | Suciu et al., "Synthesis of 9-(2,5-dideoxy-β-D-glycero-pent-4-enofuranosyl)adenine", Carbohydrate Research, 1975, 44, 112-115  |
| 880 | Sutcliffe, J.G. et al., "TOGA: An automated parsing technology for analyzing expression of nearly all genes," PNAS, 2000, 97(5), 1976-1981   |
| 881 | Svinarchuk, F.P. et al., "Inhibition of HIV proliferation in MT-4 cells by antisense oligonucleotide conjugated to lipophilic groups," Biochimie, 1993, 75, 49-54  |
| 882 | Syvanen, et al., "Quantification of polymerase chain reaction products by affinity-based hybrid collection", Nucl. Acids Res., 1988, 16, 11327-11338   |
| 883 | Szyf, et al., "Growth Regulation of Mouse DNA Methyltransferase Gene Expression", J. Biol. Chem., 1991, 266, 10027-10030   |
| 884 | Tabara, H. et al., "RNAi in C. elegans: Soaking in the Genome Sequence," Science, 1998, 282(5388), 430-431   |
| 885 | Table listing related applications and office actions and rejections from those related applications   |
| 886 | Tamanini, F. et al., "The fragile X-related proteins FXRIP and FXRZP contain a functional nucleolar-targeting signal equivalent to the HIV-1 regulatory proteins," Hum. Mol. Genet. (2000) 9(10):1487-1493       |
| 887 | Tang, X.-Q. et al., "2'-C-Branched Ribonucleosides: Synthesis of the Phosphoramidite Derivatives of 2'-C-Beta-Methylcytidine and Their Incorporation into Oligonucleotides," J. Org. Chem., 1999, 64(3), 747-754 |

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

54

of

57

**Complete if Known****Application Number**

10/701,236

**Filing Date**

11-04-2003

**First Named Inventor**

Brenda F. Baker

**Art Unit**

1635

**Examiner Name**

Tracy Ann Vivlemore

**Attorney Docket Number**

ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

888	Tazawa et al., "A Novel Procedure for the Synthesis of 2'-O-Alkyl Nucleotides" Biochem., 1972, 11(26), 4931	
889	Thompson, "Applications of Antisense and siRNAs During Preclinical Drug Development," DDT (2002) 7(17): 912-917	
890	Tidd, D.M. et al., "Evaluation of N-ras oncogene anti-sense, sense and nonsense sequence methylphosphonate oligonucleotide analogues," Anti-Cancer Drug Design, 1988, 3(2), 117-127	
891	Tijsterman, M. et al., "RNA Helicase MUT-14-Dependent Gene Silencing Triggered in C. elegans by Short Antisense RNAs," Science, 295(5555), 694-697	
892	Timmons, L. et al., "Ingestion of bacterially expressed dsRNAs can produce specific and potent genetic interference in Caenorhabditis elegans," Gene, 2001, 263(1-2), 103-112	
893	Timmons, L. et al., "Specific interference by ingested dsRNA," Nature, 1998, 395(6705), 854	
894	To, K.-Y. "Identification of differential gene expression by high throughput analysis," Comb. Chem. & High Throughput Screen, 2000, 3, 235-241	
895	Tseng et al., "Antisense Oligonucleotide Technology in the Development of Cancer Therapeutics", Cancer Gene Therapy, 1994, 1, 65-71	
896	Tuschl et al., "Targeted mRNA degradation by double-stranded RNA in vitro," Genes Dev, 1999, 13(24), 3191-3197	
897	U.S. Patent Application Serial No. 09/315,298 filed May 20, 1999, by Teng et al.	
898	U.S. Patent Application Serial No. 60/423,760 filed November 5, 2002, by Baker et al.	
899	Uhlmann et al., "Antisense Oligonucleotides: A New Therapeutic Principle", Chem. Rev., 1990, 90, 543	
900	Van der Krol, et al., "Modulation of Eukaryotic Gene Expression by Complementary RNA or DNA Sequences", BioTechniques, 1988, 6, 958-976	
901	Van Ness et al., "A versatile solid support system for oligodeoxynucleotide probe-based hybridization assays", Nucleic Acids Research, 1991, 19, 3345-3350	
902	Vickers, T.A. et al., "Efficient Reduction of Target RNAs by Small Interfering RNA and Rnase H-dependent Antisense Agents," J. Biol. Chem., 2003, 278(9), 7108-7118	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet 55 of 57

**Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivimore
<b>Attorney Docket Number</b>	ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

903	Volk et al., "An antisense transcript from the Xenopus laevis bFGF gene coding for an evolutionarily conserved 24 kd protein", EMBO J., 1989, 8, 2983-2988	
904	Wada, A. et al., "Nuclear export of actin: a novel mechanism regulating the subcellular localization of a major cytoskeletal protein," EMBO J. (1998) 17:1635-1641	
905	Wahlestedt, C., et al., "Potent and nontoxic antisense oligonucleotides containing locked nucleic acids," Proc. Natl. Acad. Sci. U.S.A., 2000, 97(10), 5633-5638	
906	Walder, et al., "Antisense DNA and RNA: Progress and Prospects", Genes & Development, 1988, 2, 502-504	
907	Walder, et al., "Role of RNase H in Hybrid-Arrested Translation by Antisense Oligonucleotides", Proc. Natl. Acad. Sci. USA 1988, 85, 5011-5015	
908	Wang, J. et al., "Synthesis and binding property of an oligonucleotide containing tetrafluorophenoxazine," Tetrahedron Lett., 1998, 39, 8385-8388	
909	Wang, X. et al., "Modular Recognition of RNA by a Human Pumilio-Homology Domain," Cell (2002) 110:501-512.	
910	Wei, Z. et al., "Hybridization properties of oligodeoxynucleotide pairs bridged by polyarginine peptides," Nucleic Acids Res. (1996) 24(4):655-661.	
911	Wein, G. et al., "The 3'-UTR of the mRNA coding for the major protein kinase C substrate MARCKS contains a novel CU-rich element interacting with mRNA stabilizing factors HuD and HuR," Eur. J. Biochem. (2003) 270:350-365.	
912	Wengel, J., et al., "LNA (locked nucleic acid)," Nucleosides, Nucleotides, 1999, 18(6 & 7), 1365-1370	
913	Westermann et al., "Inhibition of expression of SV40 virus large T-antigen by antisense oligodeoxyribonucleotides", Biomed. B. Acta., 1989, 48, 85-93	
914	Wetlaufer et al., "Surfactant-Mediated Protein Hydrophobic-Interaction Chromatography", J. Chromatography, 1986, 359, 55-60	
915	Wianny et al., "Specific interference with gene function by double-stranded RNA in early mouse development," Nature Cell Biology (2000) 2: 70-75	
916	Williams, D.M., et al., "Properties of 2'-Fluorothymidine-Containing Oligonucleotides: Interaction with Restriction Endonuclease EcoRV," Biochemistry, 1991, 30, 4001-4009	

Examiner  
SignatureDate  
Considered

Substitute for 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)***Complete if Known**

<b>Application Number</b>	10/701,236
<b>Filing Date</b>	11-04-2003
<b>First Named Inventor</b>	Brenda F. Baker
<b>Art Unit</b>	1635
<b>Examiner Name</b>	Tracy Ann Vivliemore
<b>Attorney Docket Number</b>	ISIS-5207

Sheet 56 of 57

**NON PATENT LITERATURE DOCUMENTS**

1917	Wincott et al., "Synthesis, deprotection, analysis and purification of RNA and ribozymes," Nucl. Acids Res., 1995, 23(14), 2677-2684
1918	Wolfe, S., et al., "The gauche effect. Some stereochemical consequences of adjacent electron pairs and polar bonds," Acc. Of Chem. Res., 1972, 5, 102-111
1919	Wouters, J. et al., "5-Substituted Pyrimidine 1,5-Anhydronhexitols: Conformational Analysis and Interaction with Viral Thymidine Kinase," Bioorg. Med. Chem. Lett., 1999, 9, 1563-1566
1920	Wright, P. et al., "Large Scale Synthesis of Oligonucleotides via Phosphoramidite Nucleosides and a High-loaded Polystyrene Support," Tetrahedron Lett., 1993, 34(21), 3373-3376
1921	Wu et al. Journal of Biological Chemistry 1999, vol. 274, pages 28270-28278
1922	Wu et al., "High Resolution Separation and Analysis of Biological Macromolecules", Methods in Enzymology, 1996, 270, 27-47
1923	Wu et al., "Purification and Properties of Drosophila Heat Shock Activator Protein", Science, 1987, 238, 1247-1253
1924	Yang, Y. et al., "HIV-1 TAT-mediated protein transduction and subcellular localization using novel expression vectors," FEBS Letters (2002) 532, 36-44.
1925	Yashima et al., "High-performance affinity chromatography of oligonucleotides on nucleic acid analogue immobilized silica gel columns," J. Chromatog., 1992, 603, 111-119
1926	Yasuda et al., "Purification and characterization of a ribonuclease from human spleen", Eur. J. Biochem., 1990, 191, 523-529
1927	Yeung, et al., "Photoreactives and Thermal Properties of Psoralen Cross-Links", Biochemistry 1988, 27, 3204-3210
1928	Zamecnik, P.C. et al., "Inhibition of Rous sarcoma virus replication and cell transformation by a specific oligodeoxynucleotide," Proc. Natl. Acad. Sci. USA, 1978, 75(1), 280-284
1929	Zamore, P.D. et al., "Ancient Pathways Programmed by Small RNAs," Science, 2002, 296, 1265-1269
1930	Zamore, P.D. et al., "RNAi: Double-Stranded RNA Directs the ATP-Dependent Cleavage of mRNA at 21 to 23 Nucleotide Intervals," Cell, 2000, 101, 25-33
1931	Zanta, M. A. et al., "Gene delivery: A single nuclear localization signal peptide is sufficient to carry DNA to the cell nucleus," Proc. Natl. Acad. Sci. USA (1999) 96:91-96.

Examiner  
SignatureDate  
Considered



Substitute for 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 57 of 57

## Complete if Known

Application Number	10/701,236
Filing Date	11-04-2003
First Named Inventor	Brenda F. Baker
Art Unit	1635
Examiner Name	Tracy Ann Vivimore
Attorney Docket Number	ISIS-5207

## NON PATENT LITERATURE DOCUMENTS

932	Zarytova, et al., "Affinity Chromatography of DNA Fragments and P-Modified Oligonucleotides", <i>Analyt. Biochem.</i> , 1990, 188, 214-218	
933	Zhang et al., "Single Processing Center Models for Human Dicer and Bacterial RNase III," <i>Cell</i> , 2004, 118, 57-68	
934	Zhang et al., "Targeted Gene Silencing by Small Interfering RNA-Based Knock-Down Technology," <i>Current Pharmaceutical Biotechnology</i> , 2004, 5, 1-7	
935	Zhang, H. et al., "Reduction of liver Fas expression by an antisense oligonucleotide protects mice from fulminant hepatitis," <i>Nature Biotech.</i> , 2000, 18, 862-867	
936	Zhang, J., et al., "PowerBLAST: A new network BLAST application for interactive or automated sequence analysis and annotation," <i>Genome Res.</i> , 1997, 7, 649-656	
937	Zhang, Z. et al., "Uptake of N-(4'-pyridoxyl)amines and release of amines by renal cells: A model for transporter-enhanced delivery of bioactive compounds," <i>Proc. Natl. Acad. Sci. USA</i> (1991) 88:10407-10410.	
938	Zhao et al., <i>Biochemical Pharmacology</i> , 1996, 51, 173-182	
939	Zhu, T. et al., "Oligonucleotide-Poly-L-ornithine Conjugates: Binding to Complementary DNA and RNA." <i>Antisense Res. Dm.</i> 119931 3:265-275.	
940	Zmudzka, B. et al., "Poly 2'-0-methylcytidylic acid and the role of the 2'-hydroxyl in polynucleotide structure," <i>Biochem Biophys Res Commun</i> , 1969, 37(6), 895-901	
941	Zon, "Oligonucleotide Analogues as Potential Chemotherapy Agents", <i>Pharm. Res.</i> , 1988, 5(9), 539-549	
942	Zon, "Synthesis of Backbone-Modified DNA Analogues for Biological Applications", <i>J. Protein Chemistry</i> , 1987, 6, 131-145	
943	Zuckermann, et al., "Efficient methods for attachment of thiol specific probes to the 3'-ends of synthetic oligodeoxyribonucleotides," <i>Nucleic Acids Research</i> , 1987, 15, 5305-5321	
944	Zuckermann, R. N. et al., "Site-Selective Cleavage of RNA by a Hybrid Enzyme," <i>J. Am. Chem. SOC.</i> (1988) 110:1614-1615.	

Examiner  
Signature

Date  
Considered